This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

**Usage guidelines**

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

+ *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.

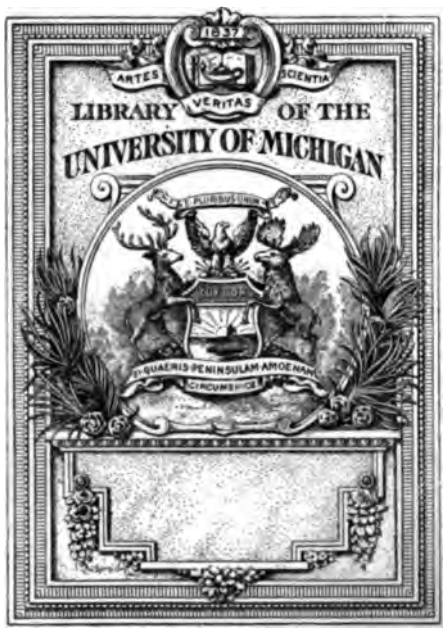
+ *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.

+ *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.

+ *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

**About Google Book Search**

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at `http://books.google.com/`


1837
ARTES
SCIENTIA
VERITAS
LIBRARY OF THE
UNIVERSITY OF MICHIGAN
SI QUAERIS PENINSULAM AMOENAM
CIRCUMSPICE

# THE UNITY OF WILL

# THE UNITY OF WILL

## STUDIES OF AN IRRATIONALIST

BY

GEORGE AINSLIE HIGHT

The Real is One; wise men call it differently
*Rig-Veda*

LONDON
CHAPMAN & HALL, LTD.
1906

Εἴ μοι ξυνείη φέροντι
μοῖρα τὰν εὔσεπτον ἁγνείαν λόγων ἔργων τε πάντων,
ὧν νόμοι πρόκεινται
ὑψίποδες, οὐρανίαν
δι' αἰθέρα τεκνωθέντες, ὧν Ὄλυμπος
πατὴρ μόνος, οὐδέ νιν
θνατὰ φύσις ἀνέρων
ἔτικτεν, οὐδὲ μήν ποτε λάθα κατακοιμάσει·
μέγας ἐν τούτοις θεός, οὐδὲ γηράσκει.

SOPH., *Oed. Tyr.*

"La religion particulière aux philosophes est d'étudier ce qui est; car le culte le plus sublime qu'on puisse rendre à Dieu est la connaissance de ses oeuvres, laquelle nous conduit à le connaître lui-même dans toute sa réalité."—AVERROËS, *from* Renan.

# PREFACE

THE views expressed in the following pages are based upon those of Schopenhauer, contained in his chapter *Vom Primat des Willens im Selbstbewusstsein*.[1] As his doctrine of the relation between Intellect and Will differs from that of all other metaphysicians, and has been little studied in England, my first intention was to prefix his essay as an introduction to this work; but finding that a translation *in extenso* would unduly swell the bulk of the volume, I have been fain to content myself with this reference to it, and with expressing a hope that my readers will draw at the fountain head, and read, if they have not done so before, what has always appeared to me the most lucid and convincing piece of philosophical exposition that modern literature has to show.

The fundamental error of all philosophies, Schopenhauer tells us, has been that of assuming the essential and primary element of the so-called

[1] *Die Welt als Wille und Vorstellung*, Part II., Ch. 19.



292099

*Soul, i.e.* the inner spiritual (geistiger) life of man, to be Thought; of always placing Thought first, while assigning a subordinate place to Will, which has been regarded as a mere secondary product, consequent upon thought. With him, on the other hand, the primary reality of every existence is Will, by which he understands not only *wish* and *resolve* in the narrow sense, but all *striving*, *desiring*, *shunning*, *hoping*, *fearing*, *loving*, *hating*, in short everything which makes up our personal weal and woe, joy and sorrow—all being merely modifications or affections of a will, either for or against. Of these Intellect is the instrument, and therefore secondary and dependent, a mere *accidens* of our existence. The will is master, intellect its busy and accomplished servant; "while the intellect is laboriously searching and balancing, endeavouring from innumerable data by difficult combinations, to extract a result which seems to accord with the interest of the will, the latter is idly resting, to enter when all is ready, like a Sultan into his divan, and pronounce its monotonous 'approved' or 'disapproved,' always the same in character, though varying in degree." And so we see the Will remaining in undiminished force through life; as strong in infancy as in manhood; still vigorous and determined in the decrepitude of age, when the faculties are broken,

on the brink of the grave. For the intellect changes with the vicissitudes of life; it grows old and decays, but the will is imperishable—*ἀκάματος καὶ ἀγήρατος ἤματα πάντα.*

I have said that Schopenhauer has been little studied in England. When studied he has generally been misunderstood, and it is my belief that, until his metaphysical doctrine is not only understood but accepted, no progress in philosophy is possible. No one who has followed the thought of my own essays will, however, mistake me for a disciple of Schopenhauer's school, except indeed in the sense in which it might be permitted to speak of a modern astronomer as a "disciple of Copernicus." I could not be. Schopenhauer is a Buddhist; I am (if anything) a Vedântist. Our respective personal standpoints are as opposed to each other as those of Calvinist and Roman, or of Plato and Darwin, *i.e.* absolutely. But we must distinguish between that part of a man's thought which consists of observed and undeniable facts, only needing to be once formulated and understood to become the general property of science, and that part which is, and must always remain, personal opinion, true only with reference to his individuality. Of the first kind is the astronomy of Copernicus and Kepler; once formulated and understood no one would think of contradicting

it, though it may be corrected in details and developed. To the other belong all religious and speculative creeds, which are determined by a man's individual character, not by his knowledge. One we call science, the other opinion. One is an intuition, the other a theory. One provides a secure basis for further advance; the other, in all objective enquiry, must be shunned as dangerous and slippery ground. Schopenhauer's doctrine of the metaphysical nature of Will belongs to the first category, that of truths which, once correctly stated, take their place among the established data of science, and cannot be safely neglected in future enquiry. But it is just to this part of his doctrine that the great majority of his readers pay no heed. Most people read only to gain opinions, and so the few who read Schopenhauer at all are attracted to his more generally interesting doctrines of pessimism, of sympathy as the basis of morality, of ascetic negation, etc., all of which he has undoubtedly illumined with his dazzling intellect, but which are purely personal, *his* views, and no more. On these it is the right, nay the duty, of every one to judge for himself, to refuse to accept them ready-made from the laboratory of any mind, however great; for no two will think quite alike. Those who read to gain material for their own

minds to fashion will easily distinguish what is "clear and new and true" from what is personal. We can believe Newton's laws of motion, and yet doubt about the prophecies of Daniel and the Apocalypse. A conviction of the ideality of perception does not commit me to a belief in tar-water.

The present work may be regarded as a continuation of my *Essay on Culture*; as a further and fuller treatment of some of the problems there merely hinted at, especially of its central thought, the Unity of Will. To bring so vast and comprehensive a doctrine, the outcome of many years of thought and observation, within the compass of a short volume was a work of no small difficulty. The need of conciseness, the novelty of the point of view, the obligation which I felt myself under of not trammeling the thought within rigid formulas of verbal expression; my determination to avoid all logical demonstration, and appeal only to the intelligent sympathy of the reader, not to his calculating reason, have, as I feel most painfully, rendered the course of the thought difficult to follow in its natural sequence. To assist the mind of the reader I have therefore added at the beginning a short summary of each study, and at the end of the book will be found a statement, in clear and simple language, of my

philosophic creed, intended, not as a list of formulas or dogmas to be necessarily adopted by all, but as nuclei round which thought may be grouped; living seeds to be planted in the garden of the reader's own mind.

G. AINSLIE HIGHT.

AUDIERNE,
*September*, 1905.

# INDEX OF SUBJECTS

## I

### THE MISUNDERSTANDING OF PHILOSOPHY

PAGE

Philosophy has severed itself from daily life and set up a kingdom of its own, whereas the really great have always lived in sympathy with common things and common men. This is a misunderstanding of its purpose, and has resulted in philosophy and logic having fallen into the hands of an academic clique who use them for their own ends, not for the welfare of mankind. We must aim at intellectual self-government . . . . . 1

## II

### PHILOSOPHIC STANDPOINTS

Illustrated by a comparison between Plato and Aristotle, or Darwin. Each speaks "truth," *i.e.* describes clearly what he sees; but the view of each differs with the standpoint . . . . . 25

APPENDIX. On the notion of life . . . . . 36

## III

### PHYSICAL REALITY

What our senses show in this world is Action, not Existence. We cannot perceive things apart from their activity. Creation is not static but dynamic . . . . . 40

## IV

### THE SEARCH FOR BEING

Hitherto the reality of Being has been sought in two ways: (1) by observation, and experiment upon physical objects; (2) dialectically, by logical methods. The first leads finally to Chance, which is a negative notion—a nothing; the second begins and ends in words. By neither method can we arrive at any useful result . . . . . 53

## V

### THE UNITY OF WILL

PAGE

The physical world is contained within, or surrounded by a metaphysical world. Every science begins and ends in metaphysical notions. This metaphysical world is Will, and is apprehended in the self-consciousness, in moments of exaltation and poetic dreaming, when it is felt to be One. Contemplated from the other side, whilst the attention is busy with external objects, it is not seen, and appears as a negative. Each world, the physical and the metaphysical, may show itself as either positive or negative, according to the attitude which we assume towards it; but the metaphysical is primary and fundamental; the physical grows therefrom . . . . . 72

## VI

### INSPIRATION

Knowledge, in so far as it is fruitful, does not spring from examination of the external features of things, but is an inspiration from the metaphysical world, and is communicable by sympathy alone . . . . . 94

## VII

### THE CEREBRAL MECHANISM

Philosophy has hitherto assumed Mind to be the ruler of all things, and the source of knowledge. This cannot be, because the Reason is eminently fallible, and the cause of all our errors. The mind is the brain, a purely mechanical apparatus, of exquisite delicacy and finish, for receiving and dealing with impressions in the service of the Will . . . . . 112

APPENDIX. On positive and negative cognition . . . . 134

## VIII

### THE ABERRATIONS OF THE MECHANISM

Hysteria and Sophistry, the deadly evils of civilization . . . 137

## IX

### ROUTINE AND GENIUS

There are two phases in human life: (1) Routine, carried on more or less automatically by the bodily machine; (2) the genial

PAGE

life of Inspiration. Routine, which makes up by far the greater part of life, may continue for a time, but cannot be sustained without some afflux of Inspiration. Even the humblest life draws perpetual nourishment from the metaphysical world . 153

X

DEFINITION AND THE CRITERION OF TRUTH

Logic is not a self-dependent science; it needs a criterion lying beyond its own sphere, and inexpressible in words. The attempt to enforce strict definitions of words is futile, and has led to words becoming our masters . . . . . 172

XI

SOPHISTRIES OF SCIENCE

Agnosticism is not the harmless creed that it pretends to be, but is eminently aggressive and intolerant. Above all it turns its back upon the one thing which has interest and value for human life, Inspiration. Not content with this it sneers at and persecutes all who try to bring this ineffable reality into notice. Words are only the instruments of our thought, and must be used as a mechanic uses his tools . . . . . 200

XII

SUB SPECIE AETERNITATIS

To reach Truth the individual standpoint must be set aside, and things viewed from that of pure Being; as they are, not as they appear to us. Logic will then teach Perspective, the absolute value of things, and Relevance, or their value relatively to any given purpose . . . . . 221

FIRST PRINCIPLES . . . . . 239

# THE UNITY OF WILL

## I

## THE MISUNDERSTANDING OF PHILOSOPHY

If it be true that philosophy begins in wonder, assuredly it ends in life. It has sadly fallen in honour since Plato wished that the governors of the State, the leaders of public action, should be philosophers. Long before Plato, indeed, as far back as the days of father Thales, we hear of witty Thracian maids and others telling stories disrespectful to the wise. But these were slaves, and it is natural to suppose that Plato's wish found response among educated Athenians of his day. To us it appears absurd; not without reason, for it is undeniable that a "lover of truth" would be very much out of place as the political head of affairs in the present order of society.

People ask disparagingly: what is the *use* of philosophy? The question is itself one of the most philosophical that can be asked; and if the philosophical specialist shrinks from putting it to himself, and evades the reply when directly challenged, it is because he finds it too difficult. Let us, then, begin by understanding clearly what is

meant by philosophy. Shortly and untechnically some one might answer that it means *thinking* about a thing instead of doing it. And if we enquire more particularly what is "thinking," we shall find that the mind, directly it receives an impression, proceeds to *classify* it; that is, to arrange it under certain headings or groups, just as a large public office will arrange the letters pouring in miscellaneously by the post under headings: "traffic," "rolling-stock," "finance," etc. The human organism, like every other machine, is a contrivance for transforming energy received into useful work, and the purpose of the classification is—just as in the office—to facilitate the work by arranging the confused mass of raw material in orderly form, that it may be more easily handled, and ready when wanted for use. Philosophy views the phenomena under simpler aspects, under higher concepts. The higher concept is always the simpler; *i.e.* it is made up of fewer attributes, while embracing a larger number of individuals. Classification is therefore a simplification of thought. The process is exceedingly difficult to carry out well, because of the number, on the one hand of the data, on the other of the necessary groups; and we have to decide in each case which grouping will be most useful for our purposes. But it cannot be evaded; without it the data are useless. Nor in reality does any one ever attempt to dispense with its aid; all men philosophize more or less perfectly; only a very wide difference exists between the crude, slovenly

and unreliable generalizations of the *soi-disant* "practical" man, and those of the skilful thinker, marked by perfect adaptation to the end in view.

This classification is the essence of abstract thought, or philosophy, and the important point which I wish to bring home is that it is not a *task*, but a valuable, indeed indispensable, *aid* when the circumstances become too difficult to be dealt with directly. It does not, like scientific research, add to the raw material of our knowledge, and therewith to our labour, but works up that which science has extracted from the quarry. The question as to the use of philosophy is thus easily answered: it is a labour-saving contrivance of the most powerful description. He who is able to take a truly comprehensive philosophic view of the material available for his life, is able to deal with a hundred or a thousand times as much as the one to whom each fact is a single detached item, to be treated on its own merits alone.

One more point needs to be noticed. If I am conversing with an expert in any craft—suppose a singer—and begin to talk with him about abstract principles of music, he will probably reply that he is contented to take music as he receives it, to render it as best he can, but neither knows nor cares to know anything of its philosophy. With true instinct he recognizes that it lies beyond his sphere as an artist, and that attention to it might even dim the clearness of his art. As artist he feels that of the thing which he can *do* perfectly and well, no philosophy is needed; the

accomplished work carries its own credentials; its own beauty and harmony are the consummation of philosophy, and their attainment has rendered needless the logical classifying process. Philosophy is not for the master but for the learner; it is a means to an end. Were the world nothing more than a machine, and fully revealed to us in all its parts, we might rest satisfied here, and discard philosophy altogether, resigning ourselves to the mechanical action of cause and effect. We might then also be content to die peacefully; for there would be no object for toil; all our work would be finished. But it is not so. We are all learners; we all, from insufficiency of knowledge, stumble and fail in the work which we undertake. So long as men are not finished artists, but are struggling for mastery over the technical means, so long will they, consciously or unconsciously, continue to seek for some philosophic scheme to guide their hands. If I wish to tunnel through a mountain, I shall begin by making surveys and calculations, and shall continue them as the work progresses, modifying and adjusting my conclusions with every new accession of data afforded by the work completed. Moreover, every workman, mechanical though his actual labour be under my direction, will reckon with himself and direct his strokes in accordance with the nature of the rock before him and his previous experience, syllogizing thus with minor and major premiss in strict philosophic form. But when the work is finished the calculations

are cast aside; the workman's difficulties with this piece of hard rock or that crumbling fault find a place in his stories of the past, only that small portion of them which has permanent value being stored as experience in his memory, to be used again as major premisses for future syllogisms when similar circumstances recur.

By philosophy, therefore, we mean nothing more than skilful classification. It follows from the analysis we have just made that all those who can do the work which their hands find to do—or think they can—will find it a useless encumbrance, while those who are not easily inclined to feel satisfied with their own workmanship, who keenly feel its deficiences and desire to improve upon what they have done, will turn to philosophy for guidance. Those who look to no ideal beyond see nothing unfulfilled; they are satisfied with having done their best, and desire no more.

Our notion of philosophy clearly takes no account of any recognized philosophic systems, such as "materialism," "idealism," "impressionism," "pessimism," "rationalism," "monism," and other technical formulas with which the earnest enquirer is at once confronted when he asks philosophy for its aid. I am ready to admit that each of these expresses a perfectly natural and healthful current of thought; but they are not the truth, not philosophy. The truth is one and undivided; it knows neither systems nor schools. The systems are, many of them, mutually contradictory, and therefore, in so far, self-refuted;

but no honest thought is ever false.[1] These systems each disclose one side of the truth, but that side only, while they often deny or contradict that which they cannot see. This distinction between the subject in itself and the particular direction which it follows in the different schools is one which underlies all speculative thought. When it is forgotten, as it very generally is in such regions, the enquiry gradually begins to claim an existence independent of its source, to seek its own purpose in itself, and to mistake its own unverified inferences for the truth. By doing this it cuts itself off from the source of the only nourishment upon which thought can subsist; it must now sicken and die, though its withered form may remain to deceive those who seek only the outer shell, and care nothing for the animating soul. To speak without a figure, each philosophical school represents one possible classification of the phenomena of the world, which we know to be a useful, nay, a *necessary* process for the attainment of true insight, and rendering it available for action. But the schools commit the error of regarding the *means*—the formula—as an end in itself, instead of as a step towards the true end, which is Insight, itself again only a link in the chain, a means to the final end—Action. This

[1] I do not count in this the thoughts of those who write or speak merely because their position requires it, or to earn a living. How many are to be comprehended in this category, the reader must judge for himself. Nor do I call honest the crude guesses and pretended explanations of physical phenomena which were in vogue among the later Greek sects, and more of the kind.

explains why, in spite of the enormous mental activity of the present day, and of the excellent work which is constantly being produced, men have now no more definite notion of the purpose of their lives than they had a hundred years ago, and rather less than they had five hundred years ago, when they received their purpose ready made from the Church, but are sinking deeper and deeper into the morass of Agnosticism and Determinism—Negativism in all its Protean forms. Meanwhile, philosophy sits with her hands folded. Her ministers have nothing to offer but dry bones and the rags of her former splendour.

It is this that I mean by the Misunderstanding of Philosophy; the notion that it can thrive when severed from the soil from which it sprang, when it has become a formula instead of a helpful instrument for life. It is a misunderstanding of its purpose; for philosophy is not sent into the world to occupy the minds of the idle with a pleasant stimulant, nor to enable scholars to earn a livelihood and reputation by retailing the vast mass of thought from past ages to students to learn by heart and put aside when they have finished their examination. Philosophy is not a plaything, but a reality rooted in life, and the humblest generalization of the mechanic who widens the scope of his activity by devising some new method of useful work, some finer adjustment or finish to the methods already known, is worth more for culture than all the lore poured out by a candidate for university honours, unless that lore has been

assimilated into his life, to help him practically in shaping his course, in foreseeing and surmounting the dangers which he will have to encounter in his journey.

I have heard it said, and the view finds some favour amongst the learned, that higher philosophy is above common things; like higher mathematics it forms a world of its own, and thrives best when kept unsoiled by the things of vulgar life. This view may recommend itself to the academical professor, whose authority as a law-giver depends upon the belief of men that he and his work are something higher than themselves; nor need we deny it a certain truth in the philosophy of formulas, where the formula itself, the creed, is taken as a sufficient end. But in the higher and purer philosophy it is most directly and mischievously untrue. The truth, the one indivisible Truth, is rooted in human nature. Everything becomes degraded and at last perishes when severed from the nourishing soil of life, and it is as true of philosophy as it is of all science and all art that directly it loses touch with the universal emotions of plain, unsophisticated humanity and falls into the hands of a professional *coterie*, it sickens. Accordingly we see how the sympathies of all the really great, all with whom the individual interest vanishes beside the weal of mankind, lie with those aspirations and emotions which are the moving force of human effort, which mark the man, be he prince or labourer, artist or mechanic, as an individual integer self-contained and

self-sufficient amidst the universe; their dominant passion is a consuming, never satisfied love of naïve, unadorned human nature; amidst the din of creeds and dogmas they hearken for "the still, sad music of humanity." So Socrates, a greater intellect and a greater man (though not a greater philosopher) than any of his disciples, was to be found, not in academies and learned institutions, but "in the public walks, the gymnasia and the markets, where all who would might listen"—just as Jesus Christ sat with publicans and sinners. So Raphael, when wishing to convey his loftiest conception of divine mystery, chose as its vehicle that before which the coldest heart never failed to warm, the lovely face of a woman. In the beautiful statue before the theatre in Weimar Goethe stands with his feet firmly planted upon the earth, looking down on the human multitudes that pass below, while Schiller beside him looks with rapture up to Heaven. Goethe holds in his hand the laurel wreath, which Schiller only touches wistfully. All through the works of Richard Wagner there runs like a ground-bass the passionate cry, not for the Ideals of music or art, not for philosophy, but for "the purely human"; and his greatest triumph is that, however critics and musicians may rage, he has never failed to touch the heart of his public. These are some of the greatest, and I might have named many more. The keynote of every great life is the same; yearning, longing for sympathy with mankind, passionate craving to draw men upwards. Never has it been more strongly or more

directly expressed than by Friedrich Nietzsche: "Man," he says, "is too beautiful for man to contemplate, and not only the moral man, but every man."

Nothing could be further from me than a wish to *popularize* philosophy in the vulgar sense; that is, lower it to the reach of unnurtured minds by shirking every difficulty and humouring the crude, undigested thought of indolent and half-hearted smatterers. It is not for philosophy to lower itself, but for men to look upwards, to understand its true teaching and rouse themselves to a higher way of life than the sordid, slovenly particularism which is the wretched product of our high-pressure industrial civilization. Above all, the student must put out of his mind the notion that philosophy can be learned, as history is learned, from a book, or by any easier or shorter method than that of his entire life. The proper purpose of a philosophical book is to put into clear logical form the ideas already present vaguely in the mind of the reader. The ideas must be there before the book is read.

And why has philosophy fallen into dishonour? Why, if it be such a powerful instrument, is it not used? Practical men know better than to refuse any useful aid which is offered them, and if they reject philosophy it must be that they find in it nothing useful. The present age is by no means unphilosophical. Countless books are published, and on every side men are putting philosophical questions. The mass of material continually

accumulating through the activity of scientific research has to be dealt with systematically; the ever-increasing pressure of the struggle for existence threatens to sap the nerves and the life of communities; now more than ever before is the co-operation of philosophy needed to support and perfect the empirical methods of the scientist. Why does philosophy withhold her hand and retire to the lecture hall, the scholar's study, the specialist's journal, there to sit smugly criticizing and sneering at the multitude struggling and dying beneath? The answer is a very serious one, but it is inevitable. Philosophy is useless because it is false.

This may seem like a rather bold statement; but let us first ask whether it be true. If it is, we neglect it at our peril. If a canker is eating at the root of the tree, of what use are the beautiful blossoms? To save the tree we must not spare the disease. We must restate our formulas, "revalue all values."

The great error which I believe vitiates philosophy, and is the cause of its utter barrenness, in view of the realities of life, is the false position assigned to Will. In modern theory Intellect or Mind is supreme; Will has become more and more refined away and minimized until its very existence has come to be questioned. Will is the originator of action, and if it be true that we are in the world to *do*, and not to *think*, the error of a philosophy which neglects the will is patent. The Intellect, which is simply the brain, an organ of

the body, is its instrument, the servant which fulfils its behests. I need not trouble myself with the demonstration of this, for nothing can be added to Schopenhauer's brilliant and masterly chapter quoted in the Preface, the fascinating interest of which is due to its lucid and convincing truth. But I must add, in opposition to Schopenhauer, that from the supremacy of Will its freedom, as Will *per se* follows directly.

In asserting that philosophy has strayed into false paths, I am not making any extraordinary demand upon the credulity of my readers. I am not asking them to believe that modern philosophers are under the spell of some mysterious infatuation, or that they are all in a dark conspiracy to lead men to the devil, and that we are to believe nothing that they say. I asserted a few pages back that no honest thought was ever false, and I am as little likely to accuse any individual enquirers of wilful perversion of the truth, as I am to overlook or disparage the beauty of a very large portion of their work. The doctrine that all mankind, or any considerable class of them, are fools may be left to others to hold; I need no assumptions that are not in full accordance with everything we know of human nature, and the error which I have indicated will, when rightly understood, be found to be just what might have been predicted under the given conditions, and to be closely paralleled when similar circumstances have occurred in other affairs.

The delicate question, how far the philosopher

is impelled by a love of abstract truth need not trouble us. It is perfectly certain that there exists in all men one motive impulse which far outweighs every other, to which in fact all others are subservient; namely, the love of power, the desire to become the lawgivers for the rest of mankind; nor are philosophers any different in this respect from other men. Now the department of human life with which the philosopher has to deal is Intellect, or, if we like, Mind—the two words mean the same thing; what is more natural than that he should endeavour to exalt Mind, or Intellect, and ascribe to it supreme authority over all other things, even to invest it with a sort of unapproachable sacredness, as a mystery high above the knowledge of the vulgar, and not to be profaned? And he can point to Mind itself, so conspicuously the director and designer of all created things, to support his view; or rather he will assume it to be self-evident and axiomatic. Descartes placed the "soul" in the pineal gland; even Newton believed it to be in the brain; and thus we may trace the error from its origin with Anaxagoras, through all its stages down to the schools of the present day crowned by the *dictum* of Sir William Hamilton:—

> *"In the world there is nothing great but Man;*
> *In Man there is nothing great but Mind."*

This position is not only perfectly natural and logical, but it has every appearance of truth. The mind is the ostensible head and ruler of the human body, and therewith of the human universe. It is so in exactly the same sense as the political head

of the Government, the King, or Prime Minister, is the ruler of the country, inasmuch as all orders, all actions, seem to emanate from him. But, as the minister is himself the recipient of those orders from a still higher authority, the will of the country, the aggregate of the inhabitants, so the brain also receives its orders from the will of the body, the aggregate of all its parts; each is fundamentally only the channel of communication between the will and the agents of its behests; the human mind is as completely the servant of the will as the minister is servant of the country. For ages men believed the "Prince" to be the supreme authority in the community, an authority against whom in the nature of things no appeal could lie; nor were there wanting political philosophers to prove that the people existed for the sake of the prince, just as now there are others who believe the final purpose of human life to be "Reason." But political theory has since very clearly established the true relations between ruler and ruled; it is for us to understand that those between Mind and Body are precisely similar.

I must here explain the sense in which I understand the word "Mind," which in English answers to the Latin *mens* or *intellectus*. The human organism is a machine for the transformation of energy, and we must guard against confusing the material upon which it works with the mechanism itself. "Mind" and "Intellect" mean the Brain, the perceiving, understanding,

remembering, and acting brain, in which all the senses are centred, from which all motor impulses issue. More particularly they often mean the human reasoning brain. Any meaning which they may be supposed to bear beyond that has been put into them by philosophers. They have nothing whatever to do with the creative power or energy which passes through the brain, to be arranged and disposed by its mechanism, and it is of the utmost importance that we should keep the two distinct.

A simile will perhaps bring it clearly home. Suppose that I am walking through a country road, and beside me is a telegraph wire, leading, it may be, to a great capital close at hand. To my senses the wire is a very ordinary object, a simple thread of iron or copper; yet it is the vehicle of a vast and incomprehensible world of action, passing continually along its substance in the messages that it transmits. Invisible, intangible forces play about its molecules, with tales of battles and intrigue, of nations built up and ruined, of the great ocean of finance, where my eye can see nought but grey fibres of metal. Supposing my senses to be so refined and perfected that I could follow the detailed course of each current passing, see what happens with my own eyes, still they would tell me nothing about the surging action related in the messages, although these messages are indeed the final cause of the wire; its shape, dimensions, substance, are determined by them, and without them

the wire would not be there. So perfect is the interaction between the two that the message received at one end, after passing as it were out of existence into the mysterious substance of the metal, is duly discharged at the other, intact in every particular, exactly as it was received.

The wire is the brain, including the nervous organism, receiving those unknown and inconceivable impressions which it discharges again as action. And as in common language we sometimes transfer the name of the vehicle to the matter conveyed, and call the message itself a "wire," so by a process exactly analogous men have come to speak of the impulses conveyed by the brain, and of their source itself, as "Mind," as though it originated these impulses. The static, rationalist, materializing tendency of modern thought lends its aid, and the vehicle comes to be confounded with the things which it conveys. "Mind" is used indifferently for three things which are quite distinct. 1. The action of the brain, perception, and movement. 2. One part of that action, the process of reasoning. 3. Will. It is true that several things may often be included under one term; but supposing we were to confound under one name: 1. The metallic wire. 2. The currents that pass. 3. The messages which those currents convey—how would the science of telegraphy prosper with such a terminology?

Philosophy has to do with the mind alone, the vehicle, the mechanism. It cannot deal with

the thing conveyed, because that is ineffable. There is no "mind" but the material organ which we call Brain, which is a pure machine—though one of inconceivable delicacy—performing purely mechanical tasks by processes of strict physical causality.

Out of this initial misconception of the relation between Will and Intellect has ultimately sprung all the intellectual confusion which marks our time. I can here do no more than enumerate a few of the points in which modern thought appears to me to have gone astray in consequence. Their fuller discussion will be reserved for the following essays. From the assumption of the Primacy of Mind the step is a very short one to supposing that the objects contemplated by the mind are the only things worthy of consideration; that the world of sense and reason, the physical world, is the only reality, and forms a system closed and complete in itself, self-sufficient and self-existing. Now it is a truth attested by a thousand facts of daily observation that the various parts of the physical world, when left to pursue their own course, tend always to come into conflict together and destroy each other; in other words the physical world *per se* is self-contradictory and self-destructive. It was the consciousness of this universal truth that inspired the ancient *rishis* of India, and is clearly distinguishable beneath its Oriental dress in the Upanishads and Vedânta Commentaries, where also the foundations of a more truthful and logically consistent way of

thought are laid. A philosophy which acknowledges only the physical world as real, must therefore fall to pieces, as ours has done, by ending in the negative creeds of Agnosticism, Scepticism, or what is worse than either, and their inevitable outcome—Sophism.

Another great and almost universal misconception is with regard to the nature of knowledge and belief; the notion that any processes within the brain can bring new knowledge, except with respect to the forms of the brain itself. The inherent defect in the form of the syllogism has long ago been recognized by logicians, who have consequently several times tried to set aside the syllogism as the form of reasoning; but this is impossible, for every argument is in form a summary of syllogistic processes which can easily be laid out in full. Now the reasoner may without difficulty veil his process, and make it appear as if he were stepping by irrefragable arguments to a conclusion of established certainty. What cannot, however, be concealed is that the conclusions drawn from the same premisses, and put forward as demonstrated truth by various champions of reason, not only disagree, but actually contradict each other; the multitude in their intellectual bewilderment draw the sophistical conclusion that men believe what they wish to believe, and that there is no real truth.

Very closely connected with this is the erroneous notion of the logical definition. Nothing is more severely insisted upon in scientific discourse

than the rigid definition of terms. This is of course perfectly just; we must define our terms if we wish to know what we are talking about; but another canon of logic, quite as important, is regularly overlooked in practice, the rule, namely, that nothing must be defined or spoken about until we know that it actually exists. Hence it is easy to deduce the futility of the dialectical treatment of things which lie beyond the range of experimental science, and therewith of all purely speculative reasoning.

A fourth most vital weakness of logic lies in the necessary exclusion of all attributes which cannot be expressed in words. Many of our finest perceptions are too subtle for either definition or naming, and yet are perceived just as distinctly and certainly as the grosser namable qualities. I hope to show in a later essay that it is just from these subtle perceptions that the most valuable material for our life is drawn, and that the ethical value of life is directly measured by the extent to which they enter into the effective cognition. The neglect of them cannot fail to have a debasing influence upon human life and thought.

A much less obvious, because deeper-lying misconception is the modern view of Universals. A sharp line of demarcation has been drawn between the Particular and the Universal, and owing to the emphasis laid under high conditions of civilization upon the *principium individuationis*, the universal has come to be regarded as in some measure an

artificial product of the mind. The antithesis is perhaps necessary in logic, but no such sharp boundary line exists in nature. The entire world, as well as each of its parts, is an organism, all working together towards a common end, each part dependent upon every other, and the whole upon each part; it lives perpetually reproducing itself; it is a unity amidst multiplicity; its inner harmony is the outcome of inner conflict. In the strictest sense there is no such thing as a single individual; all are parts of a whole. This is all that we can say at present, and I will add, that of the three possible positions: *Universalia ante rem*, *Universalia in re* and *Universalia post rem*, all equally defensible, the modern mind, under the sway of logic, has adopted the last, the lowest and most crass of the three; for it founds religion upon reason; it declares God to have been made by man.

I have only been able to indicate some of the points on which I differ from the current views on logic; most of them will be more fully considered in the later essays. They may all be said to centre in the wrong conception of the definition, and this again originates in the desire to make logic the ruler, instead of the servant of our life, to look to it for the discovery of truth. The question is not whether logical inference is useful or not. Of its usefulness as a mental instrument there can be no doubt whatever. The very last thing that I wish to be understood to mean is that I would have logic set aside or abased. I wish the very contrary, that it should receive more honour than it

does now, should not be a term of reproach, but should be held in worth instead of being foolishly worshipped, and as foolishly denounced when inconvenient. Logic is to action what rhythm is to music; it is its backbone, and the most powerful weapon that we possess against the intellectual vagabondism, which is one of the greatest evils of our time; against sentimental pretence, imposture, hypocrisy, *Schwärmerei*.

The best evidence of the barrenness of modern philosophical thought, especially in England, is the representative literature, the text-books of Mental Science, Psychology, Logic, etc., which students and candidates for public examinations are condemned to read. A more dismal wilderness than is presented by such literature could hardly be imagined. Very little is to be found in them beyond interminable strings of trivial technicalities, of no use to any one, and with a new term for every new relation supposed, however unimportant. The false and vicious method of these works is like that of a person trying to teach a language by means of a compendious Grammar, giving an exhaustive logical account of every trifling phrase or idiom, or turn of speech; the student is as little likely to gain a real insight, a living picture of the working of the mind from such books as he would be to learn a language from such a Grammar. Every one who has learned a language knows what a very little way grammar can bring him. It is a useful framework to rest the coarser members of the structure upon; the finer details of a science

teach themselves by familiar intercourse, and long practice; their delicate texture will not endure the rough treatment of a text-book. A science which is dull is false; not only erroneous but mischievous. For example, if we want to know the goal of life we may read (I open a book at random) that: "The highest condition of well-being is to have as many actual delights as possible, interpolated by ideal satisfactions." What could be more false or pernicious? Or again, an emotion which is surely of interest enough to deserve some attention from the philosopher, both for its own sake and because of the incalculable mischief which ensues from its being misunderstood, is that of sympathy; so any one who wishes to know something about it may learn that, "Sympathy is the vicarious and self-sacrificing impulse of our nature, in opposition to the self-seeking or self-regarding impulse." This is a truly astonishing perversion; it is difficult to find words to do justice to the attitude of mind which regards sympathy, the highest affirmation of existence, as a form of self-sacrifice! Such is the result of a philosophy which views human life as an incoherent aggregate of single elements. But what shall we say to the following very simple directions for determining action, recommended by no less a man than Benjamin Franklin in a letter to Priestley? "My way is, to divide half a sheet of paper by a line into two columns; writing over the one *pro* and over the other *con*; then, during three or four days' consideration, I put down, under the different heads, short hints of the different

motives, that at different times occur to me, *for* or *against* the measure. When I have thus got them altogether in one view, I endeavour to estimate their respective weights; and when I find two (one on each side) that sum equal, I strike them both out. If I find a reason *pro* equal to some two reasons *con*, I strike out the three . . . and thus proceeding, I find out where the balance lies; and if after a day or two of further consideration, nothing new that is of importance occurs on either side, I come to a determination accordingly." It is difficult to conceive how any man could seriously contemplate the possibility of actions being determined in such a way by any higher being than Goethe's *Homunculus*. Where is such teaching likely to lead the young Indian civilian, or the young University graduate who receives it for his intellectual nourishment? One of two things must necessarily happen; either he will look upon the knowledge taught him as a mere meaningless pretence,—which, to do him justice, is what he generally thinks—; or he will surely grow into a self-righteous, conceited prig. Can we say that this is contradicted by experience?

I am convinced that no philosophy can really live which does not recognize creation as a united whole, of which the different individuals, of whatever kind, both "living" and "dead" are the parts, animated by the same breath, tending towards the same purpose. In this *summum genus* all classification must find its beginning. To treat the single individuals as separate, isolated beings, and account

for them by a bald enumeration of their characteristics and relationships, is not philosophy at all, and gives no help to any one; it throws no light upon human life. The starting-point of philosophy must be the knowledge that all things are one. Of that universe each individual is, through his mind, his cognition, the centre for himself; and the further proceeding of philosophy will be to trace the relations of each phenomenon to the whole by first observing their relations to *himself*. Then we shall have living thought instead of dead doctrine. The Hamiltonian dictum will assume a humbler form:—

"*Man exists only as a part of the great Universe; in himself he is nothing. In Creation there is nothing real but Will.*"

The craving to understand the world around us is rooted very deep in man; because there is no act of our lives which does not involve and illustrate the deepest principles, or that can be rightly executed where the foundations are insecure. In a word, you must understand if you would love. I know that a whole army of lovers and enthusiasts will rise up against me, but I repeat it with surest confidence, that where you do not understand you are loving a mere phantom of your own creation, and your love, however vehement, is mere affectation, sentimentality; it will break down under the stress of actual life. This is the sublime moral of *Lohengrin*. Elsa is too truthful, too noble to love where she does not understand.

## II

## PHILOSOPHIC STANDPOINTS

ALL truth is relative to a standpoint. Ontology, the notion of fundamental reality, is not a science, but a point of view, a basis for philosophy to rest upon.

Charles Darwin, at the opening of his work on the *Origin of Species*, cites a passage from Aristotle's Physics, where the doctrine seems to be advanced that the continued action of natural forces working through chance is able to bring forth organisms fitted to an end, as we see them in nature. The conception of Chance as an active creative force is, I need hardly say, of great antiquity, and was definitely accepted as a doctrine by more than one philosophical school, especially those who drew, or at least tried to draw, the data from their thought directly from the phenomena of nature. It is what we should expect; for no one can watch nature attentively without becoming convinced that at least a great many of the most important and striking achievements are accomplished by circumstances altogether fortuitous. So we find in later Greek and Roman statues Tyche, or

Fortuna, is represented as holding a cornucopia and a rudder, emblematic of productiveness and guidance. In modern times most of the fundamental phenomena of physical science are explained by a hypothesis of chance events taking place, and certain in the long run to ensue by the law of probability, the most certain of all law, even though it is perfectly understood that nothing is physically uncaused, and that Chance is a function of the human mind.[1] And when we want to know something more about this all-powerful Creator, Aristotle will perhaps tell us that it is *τῶν κατὰ συμβεβηκὸς αἰτίων*, which is like saying in English: Chance is Accident. Identical propositions of this sort are not uncommon in Aristotle; the explanation is to be found in his standpoint, which I will contrast with that of Plato.

It has been said that Aristotle looked towards the outer world, while Plato drew upon his own mind, and evolved his philosophy therefrom. This is scarcely a correct description. Plato, also, like his master Socrates, looked to the world around him, but in a different way from Aristotle. For we may notice how Plato in the course of his argument is always turning to interrogate the objective world, as for example in the superb passage in the *Timaeus* (29 A) where he asks the decisive question: Is this world beautiful or the reverse? On this depends everything. It is beautiful; therefore . . . etc. It is true that his Ideas are mental abstractions, but they do

[1] Mill, *Logic*, III. ch. 17.

not remain mental, and his philosophy is in one sense as objective as that of Aristotle. On the other hand Aristotle very frequently draws upon his own mind, as for example when he makes politics a branch of ethics, in defiance of facts which must have been as well known to him as they were to Macchiavelli or Buckle.

Any object—for instance a ship—may be observed in two different ways. One person may watch her approaching into sight from a distance, always seeing the entire ship more and more distinctly, but never able to distinguish her parts very clearly. Another will go on board and examine her timbers, decks, cabins, can if he please count every nail in her, without ever seeing the entire ship. One will infer the details from the whole; the other will construct the whole from its parts. Each observer, although contemplating the same object, sees quite different things; but there is a certain common ground on which they meet, the borderland between perception and inference, or reason, that is between certainty and uncertainty, and here it is not unlikely that they will seem to conflict. The two observers represent respectively the standpoints of Plato and Aristotle. Plato always looks at the world as a whole, often seeming to overlook, perhaps purposely, a hundred practical details which would cloud or confuse the general view, but which are very obvious to us from our more commonplace standpoint. Aristotle, on the other hand, looks first to these particulars, endeavouring

by classification and judicious systemization of them to arrive at general statements of universal validity. The two travel as it were from opposite sides, to meet or approach each other in the middle, and *we* often feel that Aristotle is perhaps not so far from his master as he himself supposes.

Our own physical universe is enclosed and hemmed in on every side by the Eternal. Every object of our knowledge, every impulse of our lives, every science, every art begins and ends in Infinity. The chemist's *Atoms*, the physicist's *Force*, the biologist's *Life* are alike incomprehensible; all attempts to account for them fail. History begins with the gods. The aims of our lives are unknown and infinite, we tend we know not whither; the end of Ethics, the definition of the word *Ought*, is ineffable. Priests and prophets, speaking the universally understood language of myth, tell of a future life of justice and retribution; but it is beyond our knowledge; what we see is but the shadow of *Something*, eternal, incomprehensible. The world is like a garden encircled by a dark, impenetrable pathless jungle, out of which it has been cleared, and whence its flowers and its soil have come. Plato stands on the margin of the forest, peering into its depths, hoping somewhere to descry the eternal Ideas whence the things of the garden have sprung, that he may add to and ennoble the strains with new blood drawn from their ancient home. But dazzled with the glory of what lies beyond, he will sometimes be in doubt. Aristotle, on the other

hand, remains in the clear light of the garden; whenever he finds himself approaching the bounds of the trackless region beyond he stops short and retraces his steps. Often he must return to the spot whence he started, and accordingly we find him abruptly closing his argument with an identical proposition, bending it back upon itself. Hence the lesson may be drawn that if you determine to remain entirely within the sphere of the physical world you must contradict yourself in the end; a doctrine entirely verified by experience.

Aristotle, however, lived at too early an epoch of science to establish his position. The standpoint which he represents needs to rest upon a large accumulation of well-established facts, such as we only possess in modern times. The true antithesis to Plato is Charles Darwin, whose thought is the outcome of a minute, long continued scrutiny of a vast multitude of correlated particular facts, all securely established and so overwhelming in their number that to them the facts known to Aristotle must seem as a Child's Guide to a Cyclopædia.

The first fact which the modern naturalist notices on examining the endless array of phenomena before him, is that each seems to have a special function in the mechanism of the universe; a function to which its organs are perfectly adapted, so that the conclusion at first forces itself upon him that the whole must have been contrived by a divine artificer of infinite knowledge and technical skill. The mythic language of ancient thought called this demiourgos a Mind,

and philosophers have ever since striven to emphasize a notion so favourable to their own authority; the important point is not whether the constructive agency is a Mind, that is to say something analogous to a human brain, but that *it is One*. The fact that this was recognized in the very beginning, and that mythology in its wildest flights has never departed from it, is supremely important.

The second observation which the modern inquirer will make is that all these phenomena are linked together by common attributes in practically unbroken succession. Further, they are observed to be, by virtue of these bonds, massed in numerous groups, so disposed that the smaller groups are again comprehended under larger ones, these again under still larger, and so on, until at last all are united into a few capital Orders. From these facts, and others of a similar character, Darwin has constructed his well-known history of creation. His special doctrine only concerns "living" organisms, but we may extend the field when considering the universe at large. Science has drawn a sharp line of distinction between "living" matter and "dead," thereby hampering itself with a most unnecessary and troublesome limitation. It is only of late years that the hard and fast barrier drawn between the psychic life of animals and that of man has been partly given up. In the early stages of science such artificial classifications are often useful and necessary, but they may become a hindrance if too much reliance is placed

on them, and it is often difficult to get rid of preconceived notions which we have been accustomed to regard as fundamental. When we look at the extremes, no doubt the *life* of an animal and the *deadness* of a stone are very different things; but it is not possible to draw a line where the one begins and the other ends, and the distinction does not lie in the eternal order of things; like all conventions it must be discarded when not required. There is no break in nature. Herbart calls it a misuse of words to speak of the world as being alive; it is no more than that; a matter of the use of a word. It is true that no indubitable instance of the production of living beings from dead matter has yet come within our experience, but that does not disprove abiogenesis. Science has only shown that in the very limited means at our disposal, and within the very minute periods of time over which our experiments extend, we have no results to show; but abiogenesis has certainly not been proved impossible by the grand methods of nature, nor in the æons through which she operates.

The standpoint of modern science, so extended, with respect to ontology is therefore thus: Although we have no right on scientific grounds alone to assume as an established fact the origin of the entire physical world in an ultimate unit, or to use a very common mythic metaphor, a world-egg, yet we may say that scientific thought starting with objectivity will unmistakably tend towards some such conclusion; the exact nature of that

unity and the processes through which it gave birth to a world are inscrutable, since they lie within that outer metaphysical region, of which scientifically we know nothing. The order of nature in the objective world precisely corresponds to that of the mind or human brain, in its power of classification; each particular of nature is ranged as one of a species or as a concept under a higher or wider group or concept, this again under one still higher, until we arrive at a first origin which is the Unity of Nature on the one hand, and the synthetic Unity of Apperception on the other. Unity is as fundamental in the creed of the Darwinian as it is in that of the Platonist.

We may, however, take up different ground and start from the Unity itself. Let us suppose an original primordial immaterial pattern, an *Idea* contemplated by a mind, as a rhythmic movement. Further, let this primordial Idea be capable of reproducing itself in offspring which shall again be self-reproductive in the same way without limit. The rhythmic offspring will be completely and easily intelligible to the mind through its forms of Time and Space, but, continuing to multiply, the different Ideas will collide with each other, producing cross-rhythms, then conflict, and at last discord—for the present only potential, since there is no material vehicle to give them body. Each is a member of an ideal hierachy or genealogical tree, traceable through complex ramifications back to an original parent of all, which is One. The rhythms of the generator

and of its first offspring will necessarily be those known as *simple harmonic vibrations*, differentiated in only two respects: (1) periodicity, (2) amplitude. But with the collisions and consequent cross-rhythms, there appears a new feature, (3) wave-form, and through this last arise innumerable varieties of new forms in endless perplexity, but orderly and intelligible to an organism designed to receive the impression. Hence the variations.

The world we have now reached is not yet the objective universe, but music, in the wider Greek sense of the word, potentially entire, with all its multifold wealth of melody, dissonance resolved, and harmony, as we know it in nature. We do not need to follow it now, since it remains resting upon itself and unproductive. We have merely to note the fact, already recognized by many, that the roots of the objective world lie in musical relations, in harmony and melody, just as the roots of language lie in song.[1] And music in its own peculiar method of *variation* affords us a picture of the world of the highest scientific and educational value.

When this rhythmic world of Ideas is awakened by the magic touch of Matter, the objective physical world springs into being. Rhythmic vibration now becomes Causality, for all action is rhythmic,[2] although the vibrations have become so blurred and disturbed as to be hard to recognize. Each

[1] Darwin, *Descent of Man*, ch. xix.

[2] Spencer, *First Principles*, II. ch. x. See also Dr. Karl Bücher, *Arbeit und Rhythmus*, Leipzig, 1899.

Idea, the more simple and primary as well as the complex and derivative, will project itself objectively, producing many forms, all reflections of the pattern, but differing again with the cross-rhythms and modifications which they receive from collisions with other ideas, and so tending to vary themselves, and in their offspring, in accordance with their environment.

According to whichever of these two standpoints we adopt the things immediately seen will be different, but as the search advances they will draw nearer until at last they meet. The consummation of knowledge would be when both parties see alike. Science is only at present beginning from the objective side, as is evident from its destructive and critical attitude towards the other side, theology. For physical science at the present day is far more concerned to destroy theology altogether than to purify it and find a common meeting-ground. And so it may be noticed that many of the arguments upon which it relies for its authority are only valid as against current theology, and lose their truth when stated absolutely, as for example that nature must be studied objectively, by observation and experiment; that tradition is of no account, and much more.

It is the same world which we contemplate ideally *à priori*, and empirically through the senses from the particular objects. However different they may at first appear, we at last come to the same reality. The question, What is Reality? must precede every other; one might be tempted

to suppose that until it had been answered no philosophy would be possible. Yet there is scarcely any word of which the meaning is more uncertain. It must be held in mind throughout these studies that Reality appears different according to the point of view from which things are regarded, but that the difference is not fundamental, and disappears when we contemplate things as they are in themselves, and see beneath their delusive appearances. To assert that the reality of the world is only that which can be seen from one standpoint, or from another, is unphilosophical and untrue, and it is the mistake made by the Ist-ites and party leaders of our day. The hypothesis that mankind has lived in utter darkness and ignorance; that all its knowledge was self-delusion; that it has been under the ban of a hideous and wicked monster called Religion, conjured up from nowhere by priests, a monster which it has been the special merit of our own time to drive from the earth, is, I do not hesitate to say, the most preposterous and gigantic absurdity that was ever believed. Yet it is the fashionable doctrine of modern science; openly, even clamorously asserted by some; tacitly, perhaps unwillingly accepted by others, who feel indeed that some sort of theology or metaphysic is needed, but make it of no account by declaring it for ever excluded from human knowledge. It may be that Christianity is doomed, it may be that we are all to become rationalists; or it may be that the twentieth century will demolish both and offer something

new. In any case the declarations of science will not alter the course of nature, but can only interpret what has happened. What the world has now to seek is a position from which it may survey all the standpoints and find their common factor; a higher ground than that of party contention.

---

## APPENDIX TO II

### ON THE NOTION OF LIFE

As I foresee the likelihood of considerable difficulty arising in the minds of some readers through my hypothesis—from which I see no way of escape—that everything in the world, including those objects which we are accustomed to look upon as "inanimate," is in a certain sense *alive;* that no recognizable gap exists between the rock, the plant, and the animal, it will be well for me to explain more fully than I was able to do in the text, the sense in which this is meant. My view is now commonly regarded as "exploded;" I am aware that—like perhaps much more that I have written—it is unfashionable; and it is right that I should give clear reasons why I feel it necessary to depart from the orthodox doctrine.

First let us well understand that the issue only concerns the meaning of a word, *i.e.* a convention; for there is no natural law to prescribe the use of a word in one way rather than in another. In general those who wish to emphasize the agreements between any groups of phenomena

will include them under a common name, while those who wish to dwell upon their differences will separate them by using different names. To a writer, therefore, who expressly wishes to elucidate the Unity of all creation, who believes that modern thought has erred disastrously through having neglected that underlying unity, it may be permitted to depart somewhat from the accepted terminology.

The strongest objection in the minds of most readers will be that the word "life" is already in common use, and well understood; the right of any person to put his own connotation upon a familiar word will be questioned. To this as a general principle I am willing to attach very great weight indeed, and wish that it were more generally observed. But I reply that in the present case: first, the words "life" and "death" are not well understood; biology itself can give me no definition of them; secondly, that I have a deliberate purpose in wishing to extend their range, because I believe that great confusion is caused by their present misuse. The reason why the extension of our concept of "life" to include the action of stones, mountains, rivers, races of men, institutions, religions, customs, to everything that comes into being, acts and perishes—appears objectionable to many, is that it is unfamiliar; but I deny that in actual practice it is so strange and unusual as is generally supposed. The very finest and most subtle minds, especially the poets, habitually speak and act as if everything appeared to them to be alive, and the technical language of the skilled artisan is full of anthropomorphic expressions, betraying how such men really feel towards the materials of their art; so true it is that artificial formulas and logic, though they may alter the expression, are powerless to permanently deceive the mind. But we have under the teaching of science learned to look upon poetry as a gilded plaything: to believe that a thing may be untrue and yet poetically beautiful. For those who can after full consideration and due understanding of all its

bearings, deliberately accept this position, I write in vain. For myself no weight of scientific authority could ever persuade me to admit such a contradiction.

I hope it will not be supposed that I am trying to foist any notions of occult powers into our views of creation. I have stated what it is that I wish to show, and the unity of things is plainly visible to all who look for it. In saying that the issue is merely one of the meaning of a word, I do not in the least intend to undervalue its importance. A word, it is true, is only a convention, but so are all the practical data of our social life conventions. The broad rule is that a convention may be abrogated provided that the advantages to be thereby gained greatly outweigh those of its retention. I do not, however, wish the present scientific meanings of the words to be abrogated. That would be absurd; they are most useful as they are. But words are elastic, and may be used with different meanings, according to the purpose of the speaker. Science calls it an abuse of language to use them in any other sense than its own, that it may bring the mind of men into subjection by gaining the control of its most powerful weapon, and we have learned to look upon "dead" things as having only *calculable* properties; to suppose that we can press them into our service, and by purely mechanical means force them to do whatever we wish; to forget that each thing, even the deadest, has a character of its own, in some respects incalculable, and must therefore be treated in so far as living. Every engine-driver, every watch-maker, every cook or blacksmith knows that his material must be "humoured;" that it will not always yield to simple mechanical handling, but must be treated in some sort as if it were living. And just in the appreciation and intelligent humouring and coaxing of these subtle qualities lies the higher art of managing things, and getting them to work smoothly and harmoniously. The skilled engine-driver feels towards his engine and speaks of it as the sailor does of his ship, as if it were a living thing,

and in doing so adds not to the picturesqueness alone, but also to the accuracy and intelligibility of his language. This truth will hold good however words be used or misused, and it is this that I am trying to enforce.

There is in everything an element of mystery, a manifest tie binding it to the metaphysical world which, though we recognize, we cannot fully understand nor speak about; and I hope in the course of these papers to show that this incommunicable mystery and living force in things is just that which is important for the higher action of our lives, and to the neglect of which Rationalism owes its blighting influence.

## III

## PHYSICAL REALITY

THE objects of philosophical enquiry are three:—

1. The existing order of nature; that which is and acts.

2. Perception; our knowledge of the action.

3. Language; our expression of the knowledge.

The second and third of these are functions of the human subject. The second cannot exist without the first; we cannot perceive what is not there. But Illusion is a shadow imitating the form of perception without its substance. The third, Language, is not dependent upon either of the other two; it is unsafe to infer either existence or the perception of existence from words alone. This might perhaps be taken for a truism, were it not that we are bound by the conditions of human existence to leave it in some degree neglected. Under the circumstances in which we live we cannot help very often inferring both knowledge and existence from words.

Thought and Mind are not elementary concepts of existence. Thought is a function of the animal mechanism, and a philosophy which mixes

up *cogitari* with *esse* must for ever remain incomprehensible. Nor do Mind and Intellect exist in the sense understood by many philosophers. There is a *Brain*, with its dependent nervous organism, an elaborate mechanism for the transformation of energy, *i.e.* for converting an impression into a different action, a focus of causality; and *Thought* is its activity, consisting of three parts: Perception, Reason (or Syllogizing) and Action, one leading to the other and inseparable. Through its forms—Time, Space, and Causality—the mind contemplates the world as an orderly and intelligible whole.

The deepest consciousness of the human soul is of something which is not in time, but endures unscathed through Eternity, and this, from the first dawn of reflection, it calls Real. But on turning to the things of the world around, the enquiring mind finds nothing that answers to this condition. It investigates the elements from which the things are supposed to be made, but with better knowledge water, air, earth, fire, all have in turn to be discarded as perishable and fleeting. So it finds itself before the paradox that Reality does not exist, a paradox which has never been solved, for however the thought be obscured in its expression, it contains a profound truth, perplexing enquiry throughout its whole course, and threatening its results directly they are established.

If this is really the final answer, the only solution of which the problem of existence is capable,

then, indeed, we are nothing; then heaven and earth, and all the universe, and ourselves, are a mere delusion of sense. The human mind has never been able to rest satisfied with such a conclusion. Never in history have nihilism and atheism been able to hold their own for any length of time—for the pristine atheism of Buddhism never had any life.[1] Something men will ever seek, some stable First Cause and Final Cause of the seething action; and this, under whatever form conceived, they will call God, and will worship in such way as they find most natural; some by ritual and sacrifice, others by purity of life and strict obedience to duty, others again by enthusiasm and burning love. For the question of real Being is the question of God and of revelation. I presume that a truth which was perfectly clear to so very unmetaphysically-minded a people as the ancient Jews in the time of Moses (*Exodus* iii. 14) does not need any demonstration. The shirking of the question is full of peril. For the restless human mind, with its feelers always spread for new food, will not be content to starve itself with innutritious negatives, but having once resigned itself to agnosticism will infallibly pass on to sophism, the most deadly disease of philosophy, raging at the present day as it did in Athens, and perhaps in an even more insidious form, since it does not show itself openly, and infects not alone

[1] I mean that it did not remain *Atheism*, but soon became unconscious worship of the personality of the Blessed One, and at last the crassest idolatry.

the recognized leaders of thought, but also the current thought of society at large, and especially those more richly gifted among private individuals who to-day exercise an intellectual authority over their fellows which the schools have lost.

Yet deep as we must acknowledge the problem of real Being to lie, intimately as it enters into every thought of our lives, into every notion of ethics and cognition, we must not mistake its significance, nor attribute to it an authority different from that which it really possesses. Its scope does not extend beyond our own minds. It is sometimes not unnecessary to remind philosophers that the course of nature is not dependent upon our cognition, and that the world will continue to revolve whether we predicate reality of it or not. We saw in our comparison of Plato and Aristotle that either ideas or particulars may be taken as the fixed starting-point of the enquirer; whichever he choose *all other things will in his thought be unreal*, which sufficiently explains why we find the question so troublesome, when treated as one of absolute truth. It is not a question of absolute, but of relative truth, of obtaining a fixed point of departure.

The physicist who has to deal with a number of complex forces acting in different directions and in different points, in order to bring them into a convenient and intelligible form before his mind, and to judge of their net result, assumes conventionally a point of origin through which every force is supposed to act. He is free to choose it

wherever he pleases; the action of the forces and their resultant will be the same. He does not suppose the reality or unreality of his forces to depend in any way upon his choice of an origin. But for the *calculation* it makes a very great difference whether the origin be a point round which all the forces group themselves simply and naturally so as to be easily compounded, or whether it be one from which they appear even more confused and perplexing than they were before. So with the reality of the world. Things themselves care nothing how we define their names. The definition is only important for the investigation immediately in hand, and so long as this continues it must be kept stable. Many writers of our time, neglecting this truth in their endeavours to effect a meaningless compromise between things opposed and incompatible, compound a mixture, with now a little Idealism, now a little Realism, as each may be required, reminding one of the prescriptions of druggists for the woes of the body, and about equally useful.

The whole difficulty of the problem rests upon a misunderstanding. It assumes that stable Being is itself an object of enquiry. It never can be in science; we do not know things in themselves, but only their changing attributes. In ancient times the assumption of static existence as a known reality ended in the paradoxes of Zeno, said, though it seems scarcely credible, to have been taken quite seriously even by some eminent minds in modern times. To us they possess importance of

another kind; we must view them as barriers marking the end of thought along that path of enquiry. Zeno's paradoxes, so far as they mean anything at all, are the logical expression of the fact that static existence, whether we choose to call it *real* or *unreal*, is not a proper subject of scientific enquiry, and the attempt to draw any inferences from it will fail. Soon after Zeno another school of thinkers struck out a new path, still of the same enquiry into substantial existence, conceiving material bodies to be made of minute grains or atoms. Whether there be atoms or not, the enquiry in this direction has certainly been fruitful in modern chemistry and physics.

But already light had appeared from another side. Herakleitos of Ephesos, surnamed by the people "the Obscure," but profoundly studied by Plato, was the first to formulate the doctrine of movement and change as the universal characteristic of things; to show that their essence lies in action and reaction, that Strife is the true father and sovereign of the world. How entirely he realized the full consequences of his position is evident from his censure of Homer's prayer that strife might vanish among gods and men, on the ground that "then all things would pass away." Wherever philosophical or scientific enquiry has since been productive, it has followed this great thought of Herakleitos; for even modern theories of atoms are not static, but dynamic. Whether we prefer to regard them as centres of force, or as vortices, still we are only considering their action.

Of what the force? of what the vortex? These questions still remain, and we are not one step nearer to their solution now than when we were content to accept them as grains of "matter;" we know no more than did Demokritos what they *are*.

The physical world is active and ever-changing; its work is accomplished by Strife—Struggle for Existence, Victory, and the Survival of the Fittest; and though we see its pristine unity split up into numberless individuals of more or less permanence, the permanence is only relative, never real; individuality is as transient as the wave on the surface of the waters. Existence is in our order secondary; its final cause is action. Things do not act, men do not labour primarily in order to exist, but they exist in order that they may act. Steam in a boiler is not in the first instance oxygen and hydrogen, but an elastic medium under pressure. Gunpowder is not a mixture of nitre, sulphur, and charcoal, but an accumulation of gases in a small volume in unstable equilibrium; man is not born a moral being, but a very elaborate machine for transforming energy; human life is not a state, but a course of training; every animal, every plant, is in a process of development, and never at two periods in every respect the same.

In no other way is it possible to comprehend the world in which we live than as a complex of action, a machine for transforming energy, in which each part contributes its shares in different ways, each working restlessly within the sphere

of its individual abilities, in strife with its neighbours, and sustaining the action of the whole. Nothing endures; each carries out its allotted task, and then dies; its form ceases to live while the matter of its dead body remains to be inspired with new life, in new combinations, and towards new ends. And this, I think, whether it be philosophically formulated or not, is the view commonly held by men in the practical affairs of their lives. Men only look to action, and a thousand common phrases of language betray that we acknowledge nothing to be real unless it is active. We hear, for instance, that "A is the managing director of the Company, but the *real* manager is his secretary," *i.e.* he who does the work and guides its action while the other sleeps. A child will ask, "Is this a *real* watch?" meaning quite strictly, does it perform the work of a watch? does it keep the time? or is it a sham, a thing with face and hands pretending to be a watch, while it does nothing?

It is very different when we come to consider the verbal propositions of men. In the earnestness of active life they reason quite naturally from action to action; but in our theories, in every case where we give an account of our doings in words, which are in general a sort of sophistical comment prepared for the sake of communicating to others, not our thoughts, but what we wish them to think are our thoughts, the point dwelt upon is always Being. This is not intentional lying; it is in the very nature of language.

Hence the unaccountable discrepancy, always observable to those who live with open eyes, between words and deeds. Hence, also, the inordinate fondness of men for formulas, and the importance attributed to them, as may be illustrated by a number of examples drawn from familiar life. In public examinations the ostensible object is to find out how much a candidate knows—static therefore; accordingly, degrees and diplomas are conferred to mark the stage at which he has arrived; they are to enable him to make an impression upon the public; because the real question of a man's life is not what he knows, but what he can do, and no one who is seeking an efficient workman ever lays any value upon an examination. It is sophistical only. With every Church the thing always insisted upon, the dogma, is also static and sophistical. The only attitude which a Church could rightly hold towards its members would be a moral one, *i.e.* as regulating actions. Were this observed, as there is only one morality there would be only one Church, but the Churches are based upon dogma, not upon morality. However sublime and profound such doctrines as those of the Incarnation, of Grace, of Atonement, in our own Church for instance, may be, they must become sophistry when they are enforced. For how would it be possible that every one, whatever the degree of his education or the capacity of his mind, should really believe them, or even understand what they mean? It is not necessary; no Church ever thinks of requiring it. All that is

asked of the layman is that he shall *say* he believes them, of the priest that he shall *subscribe* to them. He is then stamped with the formula; he belongs to the party, which is all that was wanted.

But the insistence upon barren static formulas is not confined to ecclesiastical minds; it is quite general in science. A specialist will, by almost incredible feats of memory, acquire a knowledge of the direction, course, position, connections of the myriad nerve-centres and fibres which seems to the uninitiated almost miraculous. But of their action he can tell you next to nothing, nor can he provide a remedy when the action is from some cause diverted from its proper course. Of what use, then, is his knowledge? To pass examinations, obtain degrees, write books, deliver lectures; for the action of the world outside the limits of an academy it is too barren, while the science of the sailor, the surgeon, the engineer, the architect, of all who study action, is acknowledged to be *real, i.e.* it is itself productive of action.

The world is living, and the essence of the art of life, as of every art, lies in the activity of the artist himself, not in the circumstances and the books which he uses. But in the life of most the first aim is always to *be* something, to gain some state, wealth, official position, popularity, marriage, etc., from which all future welfare is to flow. Few look within themselves to rely upon their own free action, to realize that neither welfare nor happiness depend upon these conditions.

They are the fruits of Chance, of that of which we know nothing, of which there is no science. These it is that Agnosticism contemplates; for the knowledge of them is no knowledge; there is no science that can teach how to grow rich and popular, nor how to make a good marriage. But of the real inward impulse of our lives, the true morality which urges us to do the work which falls to our hands skilfully and well, the reality which Agnosticism overlooks, of *that* we know everything.

Action is opposed to reaction, but they are really the same thing, regarded in the one case as positive, in the other as negative. One cannot be without the other; hence we may deduce, even when the circumstances are not fully before us, that when the reaction is impossible, for instance, when the vehicle for an opposing force is wanting, the action cannot exert itself. The bird could not fly without a viscous air opposing the strokes of its wings; locomotive engines are made more powerful by adding to their weight; impulse is imparted to the arrow by pulling it backwards, etc.; and, since moral processes rest upon the same principles as physical, if a powerful character is to exert its full strength it must be placed in circumstances of difficulty, where it will meet with strong opposition. Similarly, a philosophy which would penetrate to men's hearts is helped, not impeded, by frank doubt and intelligent criticism. The greatest force cannot act except in a resisting medium, and however mighty, only to the extent of that resistance.

It remains to say what position must be assigned to existing objects in this scheme of action as the only physical reality. They are storage places of action, or to use the phrase familiar in physics, *potential* action; that is to say, action which is for the present quiescent, but ready to be drawn off for use when the needful conditions are presented. The magazine becomes exhausted with time, and we say it is "worn out;" *i.e.* the action used up is no longer replaced by a new supply. It is in a strict and literal sense *dead*, for there is no other definition of death than cessation of the power to take up new energy in the place of that expended. All the objects of the varied world contain action, each in some form suited for a special purpose. Many have been, as we say, manufactured, *i.e.* the action has been directly put there by ourselves, and it very often happens that the same object supplies action of different kinds, so that we must regard it as a *different thing*, according to the circumstances in which it acts. The sun, for instance, is the source of heat and light, but it is also our timekeeper. It makes the plants grow, but it will also kill them. Those qualities, or potential activities of an object which contribute to a given end are called *essential* to that end, and so we arrive at the curious but very important result that in things physical the essence of anything is always relative, *i.e.* directed to some purpose, and changes with that purpose. It is not a stable substance.

Logic has hitherto sought to be an end in itself, *Thought* and *Reason* being reckoned as the highest function of man, his final purpose. Out of this has arisen a whole world of misconception, falsehood, and disaster, which it is our duty first of all to recognize, but which ages will scarcely suffice to clear away. Our first step must be to raise up the skilful worker of every grade. Be he prince or labourer he must understand that his work, if he do it skilfully, thoroughly, artistically, confers on him a dignity which is high above that of thought; that thought derives its credentials from his work, and that if the work be right the thought is surely so. Not ignorance will then be thought despicable, but indolence, and want of earnestness or of skill. Yet I am very far indeed from wishing to remove the difficult and necessary work of philosophy in its narrower sense from the trained and skilled thinker. His position will not be abased by his becoming a responsible instead of an irresponsible being. He will seek his honour and his reward there where the greatest and noblest have always sought theirs, not in being the leader of an academical school, but in being the faithful servant of mankind.

## IV

## THE SEARCH FOR BEING

In contemplating the World as orderly action, or Causality, we have turned away from Being. The varied activities which our senses perceive carry us further away from Unity. The need for a stable foundation of things, independent of our minds, *i.e.* of what we see and think, is as pressing as ever.

Action is in time; Being endures for ever, and is independent of time. Action is cognizable by the senses. Being in itself is not, since the sense-organs are only apparatus for receiving the *actions* of the outer world, and so the Brain, or Mind, can only contemplate action. But the reason can approach the frontier of Being, and show in active Creation what it is *not*. Since it is not in time it cannot have number; there cannot be one, two, or three real Beings; the differences which we observe in objects lie in their actions upon the sense-organs, not in the things themselves; in their fundamental Being they are eternally One. Lastly, Being can never be expressed in words, since words only connote the attributes of things.

There are two ways in which men have usually tried to approach the question of Being. One is to search out every corner of physical creation and see whether anywhere the signs can be detected of something amid the whirl of action that endures through all changes. This is the course usually followed at the present day by the more civilized races, when amidst the pressure of surrounding circumstances the harrowed mind turns in despair to seek delivery from the tempest, or plunges with hysterical bewilderment into its depths. The second is the dialectical method, where a pseudo-concept is artificially produced, designated God, and treated as a reality; the way of scientific theology and all purely speculative thought.

We shall consider each of these methods of enquiry, beginning with the first, where the vestiges of stable Being are sought among the things of the senses. The action of the world is not one of random disorder, but all is arranged and adjusted in the orderly scheme of Causality. Harmony and adaptation are the first and most conspicuous feature of the universe, the primary fact of Nature in its orderly beauty. The forms of action are thousand-fold, and a continual transformation is going on as they collide together, acting and reacting in birth, life, death of every object or centre of action. Ceaseless change, coming and going, brought about by the struggle between opposing forces typified in the Vedic Saṃsâra and in the ἔρις of Herakleitos, all in rhythm and harmony, are the only reality of which

the senses and reason take cognizance. Whatever the object may contain beyond its action, Matter, Substance, supposed to be the bearer of action, or even by some to be its reality, is unknown to us, a mere conventional hypothesis and unreal.[1]

Every action is directed; it comes from somewhere and tends somewhere. Whence and whither we know not. We only see the boiling tempest as it passes, beginning and ending in Infinity. Let us follow it in a particular example. A scientific engineer who had to enquire into the action of steam in a boiler would begin by observing that it does work, and he would therefore look upon it as *essentially*, *i.e.* in all that concerns his enquiry, potential energy. Any other qualities it might possess, whether it were hard or soft, or white or black, etc., would not trouble him; they would lie outside his purposes. Turning to the work that it does he would see the energy always being transformed; now it lifts a weight, now it becomes heat, light, electricity, sound, etc., and in these transformations lies its usefulness for action; they form the working material for the attainment of his ends. It is the same with each particular purpose; its usefulness lies in the transformation. If, for example, the purpose of the machine be an electric light, then such a light is not a stable existence which, when once produced, endures, but is a continued transformation of electricity into light,

[1] ἡ ὕλη ἄγνωστος καθ' αὑτήν—Aristotle. "Die Materie ist nichts Anderes als eine blosse Form, oder eine gewisse Vorstellungsart eines uns unbekannten Gegenstandes."—Kant, quoted by Forel, *Gehirn und Seele.*

brought about by the struggle of the electric current against resistance. Continued transformation, exhaustion and renewal of energy, are the elementary facts of science. Now suppose the engineer to ask what lies behind the process and causes all the activity; he would find that it is ultimately brought about by *Pressure*. He has here already arrived at a metaphysical notion; for Pressure, which causes all the action, is present in every part of the machine, and yet in no particular place or moment of time. It is everywhere and always, and lies beyond the cognizance of the senses; we know nothing of it in itself, but only see its effects.

We have considered the engine itself as a single individual, a unit or centre; but its single activity branches out into innumerable trains of further action. Employed in a factory it may drive a thousand wheels, each destined to work out some special purpose, while every article manufactured goes forth itself to become the starting-point of a new train of action. In the same way countless factors united to produce the machine, and we may regard it as a contrivance for gathering together a number of impulses into one focus and emitting them again in altered form. Every machine lies within the scheme of physical causality, and is fully calculable; that is to say, when the different forces are all given, the result may be inferred with certainty. Conversely, everything within the scheme of physical causality is a machine.

The action began in the case of the steam-engine with a difference in temperature between the boiler and the condenser; this again was caused by the chemical action of the combustion of carbon, the coal when taken from the mine being, *for our purposes*, nothing more than a magazine of potential energy stored up in the mine, where it was once accumulated by means of vital processes; its ultimate origin being the sun that drew forth the life of the plants, and separated their carbon. In all this we are treading the firm ground of experimental science; every step in the process being in accordance with well-understood laws of physics. Only it will be observed that as we pass into those remote epochs the ground becomes less secure, our science less calculable and more tainted with speculation. Of the passage of the radiant heat and light from the sun to the planets very little indeed is certainly known; but if we go still further and ask whence the heat of the sun was derived we are altogether lost in speculative theory.

Or if the action be similarly followed forwards, it will be found to end just as it began, in heat, ultimately dissipated into the space whence it arose. To attempt to theorize as to what happens in those boundless regions is to commit the cardinal error of science, that of speculating where there is no experimental evidence. All around is Infinity; the physical world begins and ends in the Unknown.

The steam-engine which I have taken as my

example is a type of everything. Every object that has physical existence, from the highest organism, the human brain, down to the apparently deadest of all, the rocks and the soil, is a machine, a contrivance for transforming energy of one kind into energy of another kind. With the higher organisms, animals and plants, this needs no demonstration; they are obviously constructed upon purely mechanical principles, and differ from our machines in no essential particular, but only in complexity, delicacy, and finish. The life of the rocks is essentially the same, only far simpler. It, too, consists of reaction to a stimulus, and they carry on the causal action of the world just in the same way as the engine, only without the specially contrived organs of the machine or the animal, and with less marked individuality. All life is mechanical causality, conversion of energy; and everything is alive. And if we turn to the wide universe, here also we find a vast machine continually engaged in transforming energy. The earth, the sun, and the planets are the aggregate of the smaller centres, their work the resultant of the energies of the parts. The steam-engine is the type of all the world, coarse and clumsy if you will, but in its essential features an exact repetition of the universe.

And as in the engine we found the ultimate fact of its life to be pressure, so in the machines of nature it is a metaphysical force, either mechanical pressure, or tension, attraction, chemical affinity, cohesion, solubility, or one of the other

forces which science studies as the originators of action. Further we cannot go. We cannot enquire what are pressure, chemical affinity, etc., in themselves, or experiment upon them, for directly we begin we find ourselves dealing with some *particular* pressure, that is to say, with the action that it produces in things, not with the pressure itself. We are no nearer to an intelligible solution of the problem of Being. For, even when we knew what pressure was, there would still remain to be asked why it acts in just such a way, that it shall build up the world so beautifully and so perfectly. Men have imagined a νοῦς, or spirit of Orderliness, at work designing and arranging all; but the word alone gives little help. The last result at which science has arrived, in ancient times and in modern, is that the arrangement is the work of Chance; a result which becomes more and more confirmed by observation as science advances.

When we turn our minds to the processes of Nature and observe—as none can fail to observe—how, whatever be the immediate causes and methods of her actions, they ultimately all arise in fortuitous circumstances;—that the equal distribution of Pressure in Gases, and consequently all the laws of conductivity of heat are merely the net result of a balancing of probabilities in the motion of molecules;—that the life of every plant in our garden, every tree in the forest, once arose by the chance of a single grain of pollen finding its way with no other direction than that of the

wind, or of a careless insect, to a pistil which happened to be there, while a million other grains perished in the journey;—that the entire scheme of Evolution depends upon the occasional meeting of just those parents who are able to transmit the qualities required by the environment;—or in our own human lives that the success or failure of each is regulated only to the smallest extent by his own fitness and capacities, but mainly by the accidental elements of interest, wealth, and, above all, chance opportunities or "openings," so that in very truth man seems as if born for "the pastime of eternity;" then, while we regard the world from outside, as spectators, the conviction forces itself upon the unwilling mind that all is ordered by chance.

To escape this comfortless doctrine men have turned to miracles. The processes of the world, they say, are, in general, indeed, governed and ordered by Chance; but here and there the finger of God may yet be discerned interposing to change the natural chance course of causality. Such interpositions are not commonly visible; they do not take place in the light of day, but in the distant ages of antiquity, or in remote corners of nature where they can only be discovered by diligent search. The craving for miracles is still quite general among minds not of the highest order, and as very few are prepared fully to recognize vital phenomena to be nothing more than a higher development of physical processes, a miracle has been discerned in living organisms. Of late

years the doctrine of Vitalism has received a good deal of attention in connection with the formation of crystals. It has been observed, for example, that certain crystals of organic compounds, instead of being built up symmetrically, as is usual with crystals, are "enantiomorphic;" *i.e.* perfectly regular, but opposed as right and left, like gloves; and, as a similar right and left handedness shows itself optically in the solutions of the crystals, it evidently lies very deep in their molecular structure. Each enantiomorph, whether right or left, is never found alone, except in living organisms; nor has synthesis ever yet succeeded in manufacturing either of them singly without the intervention of living beings. As a study of nature this is most interesting, but for some the facts possess a deeper significance, and are supposed to throw light upon the origin of life itself. Chance, it is admitted, is fully competent to account for all the phenomena of the world; natural forces, sufficiently long continued, can produce everything by the mathematical laws of probability and error. But as the forces acting upon any atom must be supposed, on an average, equally distributed, Chance cannot produce an asymmetric molecule without its fellow. And since unpaired asymmetric molecules are found only in living organisms, here we see the working of a directive force; life is independent of chance. The Creator of the Universe is indeed fallen from his high estate! Overcome and deposed by science, he is still permitted—rather grudgingly it must be owned—to continue

his humble occupation as a maker of curious crystals!

One thing appears very plainly amid the chaos; the instinctive sense of man that somehow and somewhere there does exist a reality of Supernatural Being which has to be sought, however science and logic may seem to show the contrary. Nor can it be answered that this habit of seeking metaphysical Being as an object among other objects is confined to a few representatives of a certain school. The modern science of Psychology, where the "soul" is investigated inductively, its relations determined like those of any object, that is to say, its identity with the mind or brain tacitly assumed, sufficiently proves the depth of the belief that the source of action is a thing to be known and studied scientifically in the same way as other phenomena. But when studied by the methods of physical science, it proves in the end to be blind Chance, and nothing more, as Demokritos and Epikouros saw at first, very clearly; but they, as well as others, committed the common logical blunder of supposing that in finding a word they had necessarily gained something positive and definite, when in reality they had reached a hopeless contradiction, which, like a barrier, stops the way to all further speculation. Had logic done its duty, and made the distinction between positive and negative perfectly clear, such a mistake could not have been made. Chance cannot possibly bring forth anything. The word is a negative; it denotes not existence, but

non-existence. Nothing can spring from nothing, and Chance cannot create the world, nor even one of its smallest particles. The statement that a particular event came to pass by chance is a negative judgment, meaning that its causal nexus does not lie within the sphere which we are contemplating. Like nearly all negative words, it is also relative; *i.e.* it is negative with respect to some stated *data*. It cannot ever mean absolute negation of causality; for then the thing of which it is predicated would be non-existent. If I say that a certain card, turning up is a "chance," I do not mean that it took up that particular position in the pack without any cause moving it there, but merely the *negation* that the cause was not given in the sphere of my consciousness. Or if I say that a train was wrecked by accident, I mean nothing more than that the series of causes which led to the disaster were not known beforehand. In no possible way can chance be a positive *cause* of anything, and the doctrine only asserts our ignorance of Nature's ways. "Probability," which has often been confounded with chance, is a number, namely, a proper fraction, or a ratio; and, therefore, since nothing can spring from number alone, just as incompetent to bring forth the world as the negative Chance.

Physical science, pursued along the paths of experimental enquiry and observation, cannot help us to know stable Being. The threads of causality become more and more numerous and intricate as we advance. It does, indeed, in leading both

forwards and backwards into the Unknown, show itself as not self-existent. If it is impossible to watch even the working of a steam-engine without metaphysical questions presenting themselves, how much more forcibly must they occur when we turn to the larger engine, and contemplate the miracles of Nature. However closely we study them we shall find, as with the engine, very distinct evidence of something underlying the action, but no indication at all of what it is. The deeper our study, the more objects become differentiated; and, as each centre splits up into a thousand new centres, we are receding further and further from Unity.

When a science is in straits, it turns to dialectic; if experience fail, men still find refuge in talk. The enormous leverage gained for knowledge by classification and naming has led them to invest dialectic with a superior dignity, to attribute to it an inherent power of solving problems without data. The more sober thinkers, it is true, have generally been too guarded to fall into the extravagance of supposing that the mind could bring forth knowledge of itself—a non-mathematical *Vernunfterkenntnis*; but even the best have been ready to posit a Substance, a something which should say: *what is it really?* in some form or other, to give it a name and reason from it, without feeling any obligation to produce it in evidence. They felt, and felt rightly, that without some basis they could not philosophize at all, and when everything else had come to naught, a tautological *Law of Identity* was set up, to

afford at least a name, a sufficient basis for dialectic.

At first it might appear as if language were specially contrived to express Being. Every sentence contains or implies the copula, some part of the verb to Be. It is not so, however; the Being of language is not the uttermost Essence of things; the copula does not express Being, but Equality, and a sentence is a classification. Now as True Being is the *summum genus* it cannot be classified; it cannot form the subject of a sentence; it cannot be spoken about at all. We may go even further, and say that to predicate anything of a Universal is, if not impossible, at least exceedingly difficult, and the higher the concept the greater the difficulty. Socrates used to annoy and astonish his friends by proving to them that they did not know the meanings of the commonest general terms, and a little observation will soon convince any one how little ordinary people know the meanings of words which they are commonly in the habit of using. Most persons know that this particular object is a rose, and that one a loaf of bread; but what is a rose, or what is a loaf of bread very few can tell.

Here, perhaps, we have touched the root of the difficulty; for if the real Being which we seek cannot be spoken, possibly the trouble may only be that we cannot formulate it in words, cannot *say* what it is, although it is before us, and we know it all the time. We shall see later on that this is really so; I have here to show that dialectic

never has led to a knowledge of what things are. From the beginning of thought the problem has been discussed; the most powerful minds have devoted themselves to the enquiry, and we cannot assuredly say that no results have been attained. The idols established have become more and more numerous, until now at last the semi-sophistical doctrine that each man is a measure of the truth for himself, which shocked Plato and Aristotle so much, has become the common creed. But it is scarcely a solution.

Still the craving for knowledge of the one real and stable substance for which the action exists, to which it is directed, from which it springs; of something that is not relative to something else, but absolutely in itself, a norm for all things, is as keen now as it has ever been. Some stable measure the mind must have to refer its perceptions to, or it cannot classify at all. So what dialectic has failed to discover practical men have devised for themselves, in rough but workable fashion. Each individual feels vaguely that at least *he* knows certain things to be stable realities, and these he sets up for others to strive after, forming a party, with himself in the centre, and certain watchwords—"art," "civilization," "Christianity," "education," or anything else that may please him. He does not need to ask what these things are; he assumes that as known, exalts his Idol into the highest genus, according to which everything else is classified. Whatever refuses to submit does not exist, or may be neglected. So imperative is the

need, so subtle the power of words, that no absurdity is allowed to baulk the quest. We hear, for instance, at the present day "Civilization" put forward as the one thing which alone has title to exist, other things deriving their right only as they participate therein; any act will then appear justifiable in order that Civilization may advance and flourish. Christianity itself is pressed into the service, and proves a most useful ally; all its texts are interpreted and perverted to favour "Civilization." The question what Civilization is; whether, for instance, murder and robbery and overthrow of religion are among its privileges, is not admissible against the court of highest jurisdiction. Another idol is "Art"; to which many fashionable æsthetes exclusively assign real Being. Whatever can be classified as Art is real and good and true; all else is nothing; things can only lay claim to real existence in so far as they are "artistic." So little do the adherents of the formula stop to enquire what art is in itself, that they often practically limit its scope to the single art of painting, or even sometimes to furniture and house decoration; and the disciple who has joined the school out of a burning love for Art *in itself*, finds to his grief that the formula does not represent any fundamental reality of Being at all, but only one representative of it which happens to be fashionable at a certain time and among certain circles. Many are the idols worshipped by different schools—"Christianity," "Wealth," "Nature," "Love," "Freedom," and thus we may see the great doctrine of Protagoras

in its practical working. Each party formula—and there are multitudes more than I have named—is a truth, and he who adopts any one of them sincerely feels its truth with irresistible force. When challenged to show the credentials of his idol he will prove convincingly that it is a "Good"—which, of course, it is not difficult to do—but not that it is the one real Being, "the highest Good," and a norm for all things. That can never be proved, for it is ineffable. The common form of speech which calls these idols of men their "gods" is not a mere figure. Religion is living, not dead. God is not the Being whom we go to church ignorantly to worship, but that which animates our lives; and he who tries to bring others to worship his idol is proclaiming it as the universal Deity.

Perhaps the most serious attempt ever made to arrive at real Existence by dialectic was the so-called "Ontological proof." It is not our purpose to follow the by-paths of metaphysic. The final and complete refutation of the ontological "proof" in its verbal form is one of the most brilliant achievements of Immanuel Kant. Yet the track is false. However irrefragable his argument, however convincing, it cannot atone for the flippancy with which he coolly supposes himself able, by a page or two of good writing, to set aside the deepest consciousness of all mankind, that Reality of Being which inspired the life-thought of minds as great as his own—I might justly say of all who have ever thought. That our concept of Being

implies its existence is perfectly certain; the only mistake was in trying to prove it.

The Philosophy of the human Mind, in its orthodox modern form as "Psychology," is contented to remain upon the intellectual standpoint of the mechanic, or driver of the engine, who cares only for the levers and pipes of his machine, and the direct sequence of Cause and Effect between each part, nothing for the great laws by which they work. The scientific engineer, on the other hand, attends less to the varieties and details of the single parts—with which the experienced mechanician is perhaps more familiar than he is—but studies, with the aid of mathematics, the higher laws of the pressure of gases, the theory of Strains, and the Conservation of Energy. Both are undoubtedly Science, and both are indispensable to the efficient working of the engine. But the science of the cultured engineer is incomparably the higher, because it deals with higher Universals, and by the general control which the engineer exercises over his subordinates, the mechanics, he maintains a unity in their work, so that all co-operate harmoniously together, as they could not do without him. Modern science piques itelf upon a supposed objectivity. It looks at the phenomena, analyses and catalogues them, studies all the varieties of their action, without ever trying to see them as a unity, falling in consequence into virtual atheism. Disgusted with the barrenness of dialectical Ontology; feeling that Theology is but Sophistry, and

## V

## THE UNITY OF WILL

THE search for the real, stable, absolute Being of things, for a criterion of evidence, for a final Cause and Purpose of the action of physical life, a supreme Deity, has been unsuccessful because it has been wrongly conducted. Before the right way can be indicated we must understand what is meant by consciousness.

All our higher impressions are collected, as it were, focussed, into one region, the consciousness. The Mind is the mechanism for collecting and focussing the rays; the focus is consciousness, the mysterious line of division between the *Ego* and the *non-Ego*. All experience is gathered here, where the multitudinous rays are brought together, and the agent can pick out whichever he chooses, so as to contemplate either particulars, or smaller or larger groups of universals. Or he may spread the impression out, lay it along the line of time, and thus make it still more universal. To see an object means therefore to gather together the thousand different sensual impressions which we comprehend as its attributes into one perception

(*Vorstellung*) in the consciousness. Here, at this starting-point of experience, modern theory has made its initial mistake and cut the ground of reality from beneath its own feet. It declares that consciousness is always of something objective, of the object which I see—it may be of a pain in my body, but always of something external to the perceiving mind, and *that it shows nothing more.* This is not true. Consciousness does, indeed, perceive the impression from the world around, but it perceives something else besides; it perceives *Will.* In all strictness the thing which we are conscious of is the laying of the objective data before the Will. It is the meeting of the two that consciousness shows. If the Mind is like the lens of a camera, collecting the many-coloured rays of the landscape into one picture, the Will is the sensitive plate which receives them. And as in the camera the sensitive plate, so here the will is primary; the mechanism exists for its sake. This is the simple process of perception; it cannot be understood without considering the will, because there can be no action, therefore no reality, without Will. The only explanation that need be added is that when the perception is not required by the will for immediate action, it is—like everything that passes through the office of the brain—deposited in the record room, the memory, for use when needed.

The theory of physical science in its advance has striven more and more to hide the Will from its sight; to deny, first its supremacy, then its freedom, and at last its very existence; to attend

only to the objective picture presented by the Intellect, that amidst the general blindness Intellect may be exalted and upheld in its assumed position as absolute ruler. It acknowledges nothing but the changing, ever-fleeting action of phenomena — Relativity, Causality, self-existing and purposeless. Even the will may at first appear to be always relative, always will *for something*— indeed for many things; it is therefore manifold, not one. It appears to be so, I grant, when illumined by the manifold picture from without; it then splits up into many individual wills or desires, but in itself it is one. Fully to comprehend its depths you must shut off the picture, not only that of the external senses, but all objects of desire, appetites, pains, pleasures within your own body, and then in solitude, transported high above human things, in the dream of poetry, in the wrapt contemplation of the peaceful beauty of nature, in the ecstasy of music, your Will rises before your consciousness, not as desire, still less as appetite, but as a deep, vague, undirected longing, a *Sehnsucht* overwhelming your being and blinding your senses to things external. You are conscious only of the One amidst the many, which no words can tell; the mind loses itself in the contemplation of Ideas, and the return to particular life comes as a rude awaking from the trance.

In such moments of poetic dreaming a man learns directly, from his own intuition, what the speculative reason could never teach, that he is not an individual, a single self-contained unit

among others, and in antagonism to them. *Individuality* has fallen away with the burden of *avidyâ*, and he is one with his fellow-creatures, one with all creation; one lever in a wondrous mechanism, nothing by itself, but in its place in connection with the whole performing a vital function. This universal Being is Will; it has been variously called Brahman, God, Spirit, Essence; for it must not be supposed to be something new, the discovery of which has been reserved for our own times. Known it has always been to all men, and the error of the philosopher was that he attempted, first to *name* and then to *analyse* it, as if it were an object with parts and attributes. For it is unspeakable, and is not an object of scientific investigation, but of silent, inwardly directed consciousness. The name which I have adopted from Schopenhauer, Will, though better and more denotive than any other, is no more free from this reproach than the rest; for Will means in common language a directed will, a desire *for* something, whereas the pure metaphysical will has neither direction nor parts nor beginning nor end; it transcends all forms of the intellect and is known only in self-consciousness. It is the spring of living action; it is that action itself seen from within. It is the source from which the world grows and continues to grow, ever pressing onwards and projecting itself into the visible world; the first reality; and although its Unity can only be comprehended in its fulness in those rare moments when the individual is truly and

entirely himself, its *visible manifestations* are discernible in every act of life. Each act of nature proceeds from a *particular* will, which is only a phase of the Universal will, its embodiment in the object or agent, and becoming action when the environing circumstances permit, through the forms which we evolve from our study of the action and call Laws of Nature. In objective Nature we see the action, the result, and call it kinetic energy; whilst its particular forms are called chemical affinity, vital force, pressure, heat, etc. But in *ourselves* we perceive both the will and its resulting action, and therefore the essential identity of both, although the will itself is one, and the particular manifestations are antagonistic to each other, constantly in collision together.

There are in the consciousness three well-marked elements, each of which has brought forth its own philosophy—

| | | |
|---|---|---|
| External (through the senses and brain). | I. Particulars ... | Modern science, dealing with physical action. |
| | II. Universals (Ideas) | Plato. Real and Causal, but not Objective, since devoid of Matter. |
| Introspective. | III. Will ... ... | The Vedânta. One, Eternal, not Individual. |

All of these, Particulars, Universals, Will, are testified to by consciousness. But it is important to note that they cannot all be positive realities together. Which we assume as positive will depend upon the point of view; the others will be negative, or, what is the same thing, incomprehensible. So we find each school of thought,

fixing its mind upon one reality alone, absolutely repudiates the others, declares their objects to have no real existence, describes them as shadows, delusion, dreams, and other negatives. Atheism, therefore, has philosophical credentials which are unassailable. For just as modern science denies existence to the *Ding an Sich* and to Will, so, and in the same sense, but with far profounder insight, and consciously, did the ancient Rishis always declare Brahman—the very Brahman whom alone they acknowledge as a reality—to be negative.[1] A negative is in every case relative; an empty[2] glass means a glass empty of liquid; a free[2] people means a people free from foreign rule, etc., and so when a metaphysical perception is spoken of as negative, it means negative with reference to what we ordinarily call positive and real in objective nature, to the perception of phenomena. Absolute negativity does not exist, and cannot therefore be spoken about or asserted. In this sense (and in no other can it possibly be intended by any sane person) atheism expresses a truth of the highest speculative importance.

We have here touched upon the fundamental

[1] It is not necessary to give references to the numerous passages in the Upanishads, which are familiar to every student of ancient thought. Sankara's Commentary, i. 4, 15 (*Sacred Books of the East*, xxxiv. 267), decisively shows my explanation to be in accordance with the Vedas. "If Being ordinarily denotes that which is differentiated by names and forms, non-being denotes the same substance previous to its differentiation"—in other words Will (Brahman) is negative with respect to the physical world (names and forms).

[2] Cf. *Essay on Culture*, p. 88, where "empty," "free," etc., are shown to be negative terms.

paradox of thought; for every man finds Particulars, Universals, and Will in the data of his consciousness, and is by nature receptive in greater or less degree for all. Yet they do not agree together; they are in a certain sense antagonistic. Systematic philosophy affords no help at all, but contents itself with negatives—what is called Agnosticism, that is to say, denying and reviling all gods, and it is not surprising that the ordinary worker, who needs thought to direct his action as well as a God, a Unity, becomes shy and altogether mistrustful of philosophy. Only on that high vantage-ground of thought which rises above schools and formulas, which knows no language, and therefore cannot be expressed, which surveys all the courses of men's thought as true, all emanating from one supreme Truth and Reality, recognizing their contradictions and the words that express them as mere garments, obscuring the gracious form of human thought, to be cast away in those higher regions, can light be gained.

The sublime effort of introspection is in its fulness and purity only possible to the finer and nobler natures after purification in the fire of human life. Indeed, it might be said that the spiritual goal of the action of life, the final purpose of culture, is the perfect attainment of that transcendent faculty. Here all appears tranquil, self-existent, Infinite. To use again the symbol which has served so often before, but is still unapproached in its depth and expressiveness,

the world is as the fathomless depth of the ocean; peaceful, eternal, broken on its surface into countless waves and forms of entrancing beauty, moving in rhythmic order and law in endless variety, but transient and unreal, mere disturbances of the substance of the ocean itself. The knowledge we are seeking, the true science, is not knowledge in the ordinary sense; nor is it gained by what is called education; these only show the relations of objects among themselves, and lead on, not to Unity, but to greater and greater diversity and complexity. True knowledge, or *insight*, is a habit of mind, and there is no royal road to acquire it, or any other than the long, difficult path of simple duty in the affairs of daily life. Traps and pitfalls lie along the road; false guides with easy and enticing formulas to lead the weary pilgrim astray. The fashionable æsthetic cant of our latter-day prophets and theosophists, so enticing to some minds, is not one whit less superstitious, though far less picturesque and interesting, than the spells of mediæval mystics. Nor can the knowledge be obtained from books or teachers, but only from rigid self-sacrificing discipline in life itself, carried through fearlessly, truly, and without faltering to the end. Woe to him who attempts those depths if he be not equipped and strengthened for the journey! *Erkenntnis*, Insight, is not a memory for facts; nor is it repetition of any creeds or worship of any sect or leader. It is the knowledge of the Self; it is fortitude,

purity, patience, faith, and hope; it is love of the Beautiful, the Good, the True: it is dwelling in those fields where grows the nourishment of the wings that bear the soul aloft.[1] From that soil, science, and art too, will spring and thrive. It is love of the noble and the great; Carlyle's Heroism, Aristotle's μεγαλοψυχία. It is the love of them, but not the talk about them; for the deepest love is silent.

I fear that this way of approaching the problem of existence will to some appear paradoxical, and perhaps I shall be accused of mysticism. I must ask the indulgent to bear with the difficulty which I am under in having to express metaphysical things in a language not constructed for them; and not to tie his mind by adhering to too rigid a meaning in words. I hope that the distinction between the physical "reality" of Action, and the deeper "reality" of Being has been made sufficiently clear in the foregoing, and the seeming anomaly of the same thing being both positive and negative; of something to which no name can be given, and yet is the essence of all things; of a Will at once immanent and transcendent, will not cause any difficulty. Nothing mystic is intended. I have no complaint against mysticism in competent and responsible hands. All highest thought is in some sense mystic, and it was long ago observed that the word is not spelled with an "*i*." But my thought is not of that kind which needs mystic expression, for it rests upon the firmest

[1] *Phædrus.*

ground of common daily life, of things well known to every one; no abstruse philosophy or special scientific knowledge is needed to know that there is much in life which words cannot express. So far as I am aware I have not said, nor shall I say in these studies, one word that is contradicted by the strict teaching of experimental science. The *deductions* drawn by scientific men are indeed often at variance with mine, for reasons which I have tried to indicate in the first study. If the ground that we are now traversing appears unstable, it may be because our minds have been led astray by false science and false logic. Very often mysticism when examined will be found to mean only a way of looking at things different from that to which we are accustomed, which is just what I am trying to bring about. Modern thought is ruled by formulas and authorities. I do not for a moment wish to say that the works of Locke, Hume, Descartes, Spinoza, and the other representative thinkers of England and the continent, are not interesting and valuable; they most certainly are. But I do assert most emphatically that not one of them knew what is meant by metaphysics. It was not possible that they should at the time when they wrote. They had to deal with the absurdities of a false theology, which for a thousand years had made Christianity a laughing-stock to the world. Until these had been overcome all higher philosophy was out of the question. Kant had a perfectly clear notion of metaphysics; but with all his gigantic intellect he very often

seems as if crushed by his own weight and strength, and his thought is not easy to follow. As for the accredited modern professors of our Universities, so far as I am acquainted with their work, they all commit the same error of resting metaphysics upon physics, or in their own favourite phrase, founding Religion upon Reason. With physical science in itself I have no dispute at all. Modern science is an edifice of marvellous beauty and accurate workmanship; it has been built up by centuries of patient and skilful study of nature, and is wholly admirable. What it is suffering from is the absence of a metaphysical basis, in consequence of which it is unable to pass one step beyond its own rigid bounds, and all its brilliant achievements are barren for the soul, because it is godless.

We saw before that none of the fundamental notions of science are in space or time, or have material body. Yet it seems as if science could conceive of nothing except as bodily, and so it seeks to invest with a body things which in themselves, in their inmost being, have none. Pressure must be conceived as the impact of molecules; diseases are carried by bacteria. I do not know whether any one still believes the soul to reside in some organ of the brain, but the illustrious Professor Weismann has assigned immortality to the seminal cells. Whatever be the truth in the minds of these speculators it is certain that material body is only the vehicle, an accident of the real agent, and may be dispensed with. If,

for instance, bacteria are the essence of infection, how is it with such affections of the body as yawning, coughing, laughing, crying, all of which are notoriously infectious? Are these also to be ascribed to microbes? If so, we may extend the theory still further to include fashions of dress, of customs, of thought, which are just as infectious as cholera or smallpox. The reality of infection must lie deeper than the material bacteria, since it can do without them. To confound the infection with its vehicle is like mistaking the bee that carries the pollen for the life which it propagates. The reality, that which acts, that which brings forth the new tree, is the life itself, the metaphysical Will, not the vehicle of its transmission.

The same with heredity. Little indefinable tricks of manner, habits of thought, even ways of expression, are just as heritable as features and complexion. What have they to do with cells? They are a predisposition, a *will* of the cell to develope one way rather than another. Science can indeed tell us much about the action of these things; but one question it can never answer, namely, *what they are.* When we know that the sensation of light is caused by vibration of ether, that infection is carried by organisms of low structure, we are not a single step nearer to the goal than before, and until this Unity of Being is found the bond which holds our concepts together, and distinguishes Science from mere Knowledge of detached facts, is wanting.

The scientific student will certainly condemn the attitude of subjective, self-absorbed contemplation as both mystic and mischievous. And with perfect reason, so long as he practises strict, narrow science; for then his first duty is to preserve a rigidly objective attitude, and to guard his mind from the entry of any trace of subjectivity. His special task, that of ranging particular phenomena within the great scheme of causality, is not creative, and any leaning towards the poetic, imaginative, creative attitude would dim his vision. He needs no God beyond his own senses and mind, and the worst epithet that can be applied to a scientific result is to call it "visionary"—that is to say, negative. But we now know that the negative only relates to his own standpoint, that of narrow scientific enquiry. To the creative artist, on the other hand, this visionary, contemplative world of introspection appears like the only reality, and that of science like a false and artificial system disfiguring the face of Nature. The godless student seems to him to know nothing of Nature herself, but to care only for her methods and systems. Both are right; but the artist in so far perceives the higher truth, as his is the eternal, fundamental world, upon which the other rests. Art can dispense with science, but not science with art. Homer knew no science; but the student of science, directly he passes from his narrow causal scheme, becomes a poet. A tragic story may disregard history, and yet remain a beautiful work of art, but the

historian cannot afford to neglect literary composition. The mind of a true follower of science is itself a poem.

One result of the vicious inversion of the relation between the physical intellect and the metaphysical will is to place art and poetry in an altogether wrong position in modern life. Art is treated as an efflorescence upon the surface of science, a superficial adventitious product, a recreation for leisure moments, to be enjoyed only when the serious business of life is over. Both suffer in consequence. All work that is not done artistically is done badly, and the life which is not poetical is misspent; while art which is no more than an ornament on the outside, which does not itself constitute the very fibre of human existence, is spurious and baneful.

We are now in a position to judge of the opposing doctrines of Chance on the one hand, and on the other of a Will working through Causality; what the ancients, with a very fairly correct appreciation of its character, though using a wrong name, generally called *νοῦς*.[1] The two are the *same thing*, regarded from different standpoints. We see Nature in an orderly manner building up her organisms—living and dead—carrying out her action; striving ever to perfect her methods, to enhance the beauty and efficiency of her forms. The onlooker, who has no share in her creative action, and knows nothing of her purposes, sees

[1] It is a mistranslation to render *νοῦς* by Reason, which always means syllogizing, or at least classification.

only a negative; to him everything appears to be the work of Chance, while to another, working in harmony with her, and able through his self-consciousness as it were to regard her work from within, there is no such thing as Chance; all is the expression of a pre-ordained music, of forces working harmoniously together, each individual advancing the work of the others and of the whole in perfect concord and unity. The policeman at the street-corner will describe the people hurrying by as "chance passers." He knows nothing of whence they come nor whither they are bound, but he sees their numbers passing this way and that. By observing and noting their movements he may devise Laws of Chance, and calculate the probabilities of the future. But to each passenger himself all this is nothing; the motive of his passing that particular spot is no chance. He is conscious of a moving force—ultimately a will for something—which directed him along that path. Only the policeman called it chance, because he knew nothing of the motives.

Before continuing, I wish to introduce a term which is likely to be very useful, the term *Organism*, and to explain its meaning. It denotes a system of different actions working together towards a single purpose; a One amongst Many. Such a definition will cover everything, from the Solar System down to the smallest molecule of matter, as well as a work of art, an animal body, and a machine of human make. By this definition *life* and *death* have a very intelligible

meaning; life is the continued action of the organism as a whole; death its cessation as a whole, the actions of the different parts being diverted into other organic systems. Next let it be noted that the definition admits of an organism *within* an organism; a molecule within a cell, a cell within a functional organ, this again within a human body, while the body itself is contained within a social community, and so forth, each unit forming a self-contained whole, while subordinate to a higher unit, as we find them arranged in the scheme of nature. The relations of the different units in this scheme will, I think, become clear if we consider every unit—for instance, a human body—as an organism, and compare it with another organism, such as a political state, constitutionally governed. The individual actions of a state seem to emanate from the executive Government, just as in the human agent bodily actions emanate from the brain. But we know very well that the Government is only the agent of the will residing in the entire community, which is One, and not localized in any particular part, but present in all. Similarly, in the animal body the needs of every part are served by the brain, and so we recognize that the many individual actions of the parts, even when antagonistic among themselves, work together towards the common end, and the seeming central ruler is really the servant of all the parts.

The world thus shows itself as a hierarchy of organisms, one within the other, and there is no

breach of its unity. The seeming fact upon which science lays so much stress as evidence of an impassable barrier between the living and the dead, namely, that the one contains its purpose within itself and the other only exists for the service of others, is a delusion, due to want of insight and sympathy. The will of a steam-engine, it is believed, is not its own, whereas that of an animal resides within itself. How this is to be reconciled with the doctrine of Determinism which science has adopted as its creed I do not know; but it is a grievous error. There is but one Will, and all obey it; the only self-existent, self-determining being in the universe itself. Is a man less a man because he serves another? In the kosmic hierarchy the organisms are so disposed that one shall serve the other, each in turn ruling and serving in accordance with the will of the All. This is true alike of the machine, of the plant, the animal, and the human being.

All creation is permeated through and through and animated by an all-ruling Will, which is eternally striving to actualize itself in phenomenal life. The objects of the world, including our own bodies, are the machines through which the actualization is accomplished. In each process of life and growth we may watch how Nature is ever striving to intensify itself in higher forms, the actualization gaining in complexity as new obstacles necessitate new organs and methods, while all is held together by one ruling hand. Who could closely watch the growth of a plant, the habits

of an animal, without feeling that a mysterious force is animating and maintaining the causal processes, directing them so that all shall combine to the one purpose of its being? Chemical action, electricity, osmosis, and other well-known physical forces will account for all, you say. Truly they do; still you have to assume a "natural proclivity," which is only a term for our ignorance of why one sperm-cell builds up a rabbit, another a cow; why one substance crystallizes in square rhythm, another in triple. Who put those forces there? who arranged and adjusted them so nicely that each should contribute just its proper share to support the whole? A miraculous force is seen welling up from the depths of nature, shaping, adjusting, creating; whether we call it "vital force" or "psychical law" matters very little; *that* depends upon our own individual standpoint, but the important thing is that it is one, and is tending to one end through all the varied means, through adaptation, strife, failure, better adjustment, and final survival of the fittest; often failing and again beginning with renewed effort till the end is gained. No one can see the will; but what it *does* we see, and if it cease the action also will cease. Our consciousness, the onlooker, shows it as a judge, or referee, allowing or disallowing, but taking no part in the action, only using physical causality as the instrument of its projection into objectivity. Every action is possible to the will; it is all-creative; as every pattern is possible to the lace-maker sitting with her bobbins before her, and

weaving, by simple movement of one thread and another, just that web which she desires; as all literature is open to the type-writer, who produces the sentences he wishes for by touching the levers in turn, never breaking the causal sequence, but simply pressing or abstaining. Thus do the varied causal actions of the Universe lie ready before the will to allow or disallow as it pleases; the levers are in position, and as it presses with the mechanism of a human brain now one and then another of them, as it reacts mechanically to an impression, or lays it by for the future, furnishes or withholds a supply to meet a demand, so it brings forth the harmony of active life. For that harmony which enables each thing to fulfil its functions amongst others around it, which makes it appear as if designed to fulfil a purpose, *that*, and not the material composition of its substance, is its true being.

So long as we continue to think of reality as exclusively physical and material; so long as we neglect to recognize the ultimate physical reality of things as one; so long as we only regard the mechanism, and overlook the source of the action, the purpose of the mechanism, we shall never learn the real springs of Nature, and all allusion to them will seem like myticism or idle poetry—as if "poetry" did not mean *making*, and "art" *joining together!* For the humblest work as well as for the most exalted the one thing needful is the will; if that be strong, steadfast, enduring, it will find the technical means for itself; and every

failure which is more than momentary and accidental is due to feebleness or uncertainty of purpose. In all human work, character, the permanent will of the agent, is of more importance than intelligence or technical skill.

The favourite notion of the unsophisticated mind is that the world is made for man, who, through the privilege of possessing an immortal soul, stands alone amidst creation. Better insight changes this, and shows how man himself is made for a higher and wider kosmos. The artificial lines drawn by the vanity of men still encumber our thought. Many, even at the present day, cannot bear it to be supposed that they come from the same stock as animals. The more we advance in knowledge the better able we are to throw off such artificial distinctions. Who will at the present day assert that vital force is anything more than the harmonious co-operation of a thousand physical "laws," all purely mechanical, and if not yet all understood, at least all capable of being understood by science, only, owing to their complexity, more difficult to follow than are the same laws in dead bodies? For the stone acts and reacts through the contact of its surface just as does the animal through its organs, the plant through its root and leaves; it resists, falls, strikes a blow, or liquifies in a solvent through the inherent qualities of its being, as a man eats, drinks, and loves. There is no difference of kind, but only of complexity between their action, and each lives for the supreme,

eternal Will of the universe. It is not the stone, not the plant, nor the man that acts, but the will that actualizes itself through their instrumentality. The wider the field, the more universal our enquiry, the more forcibly will the Unity of will come home, and we see, dimly at first, but with increasing certainty, that the soul, so far from being a property or possession of man, and enjoyed by him alone, is the very Universe itself.

"I am that which is. I am all that is, that was, and that shall be. No mortal man hath lifted my veil. HE is alone by Himself, and to Him alone do all things owe their being."

Such Knowledge is better gained by intuition, directly, by close observation and sympathetic understanding of the ways of Nature herself, whom we may always trust, by rigid, systematic attention to the work that is set us to do, than by speculative deductions which no one in his heart believes. For it is the theme of all creation, the one lesson which Nature is always teaching. And when we watch her devices: how when she fails to produce the thing she wants in one way she will do it in another; how when the action is somewhere disturbed, some essential part of the mechanism breaks down, its duties are taken up by other organs; as we ponder over all the seeming magic of instinct, how ends hidden from our view are reached by her unerring guidance; the carrier pigeon finds its home, the hunted

animal escapes to refuge in distant unknown hiding places, the flower knows the month of its blossoming, the bee that of hiving,—it is almost as though the Will were present and speaking:—

"So schaff' ich am sausenden Webstuhl der Zeit,
Und wirke der Gottheit lebendiges Kleid."

## VI

## INSPIRATION

In nothing does the Unity of Will show itself more convincingly than in the philosophic thought of men. Perhaps this will seem like a strange assertion, and I am bound to treat it a little fully. At first sight, indeed, nothing could appear to be more chaotic than speculative thought, and it might well be said that no two minds think alike. Very true; nor at first sight does a rose-bush resemble an oak-tree, although of ordinary people very few would perhaps be able to state any essential distinction between them, while the botanist proves the artificiality of the distinctions which he draws by being obliged to invent a special term for each. It was Bruno, if I remember rightly, who first noticed that no line ever repeats itself in Nature; yet the number of curves occurring naturally is very small indeed. Ruskin's famous plate in the *Stones of Venice* might almost lead one to think that there is only one fundamental curve, of which all others are varieties.

Those who suppose that the thoughts of men

are adequately represented by their words will scarcely understand what is meant by Unity of Thought. But the knowledge which we have gained of the purpose of man's life, that it is not thought but action, will oblige us to recast our habitual views on this point, as on many others. For if life is action, then language is the servant, not of thought, but of action. That is to say, every statement which a man makes is for the sake of some action, to satisfy some impulse of his will. It is not, as is commonly pretended, merely to express something present in his mind, a "thought." Whatever may be in his mind, he will not utter it unless some object is to be gained by doing so; and conversely he will very often utter things which are not in his mind, *i.e.* that are untrue, if he has a purpose to gain by saying them. The purpose may be to persuade some one else to support his view, to invigorate a party, perhaps because he is paid to say it, or to gain credit for himself as a very clever man, and so enhance his own personal value in the eyes of other people; or it may be something quite different from any of these. The object of speech, except perhaps in the cases of very simple and of very lofty minds—children and geniuses, for instance—is not to express a thought for its own sake; consequently it is not to be expected that men's assertions should be adequate representations of their thoughts, and we commit great injustice towards each other in supposing them to be so. Language

is not contrived for any such purpose, and it would be impossible to give expression to our real beliefs in such a vehicle. To understand the real thoughts of men we must learn them by sympathy, on which I must now say a few words.

It is a significant comment upon human life and its ethical value that all those words which express our noblest concepts, such as "sympathy," "virtue," "love," "truth," have become so degraded by use that one must hesitate to employ them for fear of being misunderstood. Let me therefore say at once that the meaning in which I employ the word "sympathy" has no relation whatever to the turgid condolence which passes under that name in fashionable society, and is reflected in its literature. Sympathy in that sense is, like every other form of sentimentality, a mere lie, an affectation of feeling for the purpose of furthering one's own personal ends. True sympathy can only be felt by the strong with the strong; those who are enfeebled by distress lie without its pale; though, on the other hand, it eminently belongs to those strong and heroic natures to whom affliction and suffering are a trial of strength, a means of purifying the soul from its inherent dross, that it may gird itself to greater efforts: Prometheus, Antigone, Wotan, Helen Alving in Ibsen's beautiful play *Ghosts*.

Sympathy is feeling with some one else, unity of thought. Or, as the words "thought" and "feeling" have no exact meaning in the technical

terminology of our strictly mechanical science, which only knows perception and action, we may describe it as the state where the same perception brings forth the same action. It is identity of will. When the will of one man coalesces with that of another there is sympathy, which may be of any degree, from the mere unity of purpose in one particular respect between two partners in business to that absolute union of two hearts in perfect friendship and harmony which we so often hear of but so rarely see. A higher form of sympathy, needing very exceptional strength of character, is when the individual joins with a higher and wider unit—that of a party or community—before it has become corrupted, as in a church or a social movement in its earliest stages, merging at last into the highest of all, where the soul seems to mingle with the Universe, to draw its breath directly from Nature, and feel there the unity of things, the individual becoming as it were the interpreter and spokesman of God Himself, as in Tennyson's *In Memoriam*.

This intimate communion of the individual with Nature, when the mind, in perfect sympathy with the world-All, receives its orders directly therefrom, is Inspiration. All new and fruitful knowledge, science in the best and strictest sense, ἐπιστήμη, is inspired. It is not gained by studying the single facts of nature, classifying and comparing them together, and then selecting that which fulfils the conditions; that is to say, it is not first acquired in that way. It is afterwards

tested, examined, verified by these processes, but its source is elsewhere. It comes from close, intelligent study of nature as a whole; from intimate, long-continued conversation with her, sympathetic understanding of her ways. It is not learned, but revealed, perhaps in a moment, as a sudden flash illuminating the field, perhaps by slow degrees; not as a single particular fact, but always as an *Idea*, creative, impelling resistlessly to action, but needing first to be purified, or, as we say, *established*, in the laboratory of the brain with the aid of its instrument, language. The word "Idea" is used with perfect propriety in colloquial English, and all the disquisitions in the world upon Platonic metaphysics cannot add one jot to the popular phrases: "An Idea has struck me;" "I have grasped the Idea." Of all who use these familiar idioms, how many reflect that our very feeling of their aptness gives a direct contradiction to the modern theory of knowledge? The new Idea does not grow out of the object contemplated; it *presents itself*, *strikes* the mind, and has, like all fundamental scientific notions, a metaphysical origin.

Goethe might have studied stamens and leaves of plants and dead bones of animals for the whole of his life; he would not have perceived their homologies had he not been inspired. Professor Joule never discovered the Conservation of Energy by stirring water with paddles. The contrary is true; he stirred water because the Idea of Conservation of Energy was present before his mind,

and he wished to *prove* or *test* it, *i.e.* to purify it, and learn exactly in what sense it was true; and then to *formulate* it, or state it in precise language to other people, that it might become common property and be useful to mankind; just as any one would do with a new fibre or drug that he had discovered. Joule was not the only man whom the Idea had struck; rarely is a discovery made by one man. Conservation of Energy was, so to speak, "in the air," and had long ago been apprehended with more or less distinctness by many others. The nebular hypothesis of cosmogony was first conceived by Kant—altogether *à priori*; it was afterwards proved, *i.e.* examined and elaborated, by Laplace; it is scarcely yet fully established, although every year adds to its probability.

The Idea always appears at first, so to speak, in the germ, *i.e.* vague and unformed, with its parts yet indistinguishable, just as nature produces her organisms from an indefinite germ. But the life, the reality, is there entire; at first potentially, to be tended and trained in the nursery of the experimental laboratory; at last, when fully grown, to be clothed in words and presented to mankind as a scientific doctrine. This will perhaps be called metaphor; but the birth and growth of every organism is alike, and with things that are alike metaphor is better than demonstration. Scientific discovery is a natural growth; it is not an artificial product fitted together by the reason of man. Its origin is as hidden as that of life in the germ. Inspiration is around us everywhere,

speaking to us through every form of creation. If it passes unnoticed it is not the voice that is wanting, but our own minds, the mechanism, that cannot grasp the wondrous message. It comes from the contemplation of Nature as a whole—a Unity; not critically, but sympathetically. So regarded and identified with ourselves, Nature is the metaphysical world; what the nations have always called God; and the thought it brings is not an inference, but an Inspiration.

Such is the highest knowledge; but every sympathetic union with other organisms brings with it, in greater or less degree, a furtherance of knowledge. Rightly to understand any object we must in some sense identify ourselves therewith, just as if we wish to speak a language thoroughly we must identify ourselves with the people who speak it, and become for the moment one of them. Richard Wagner, carrying on the great idea of Lessing, has shown how each single art, when it reaches the limits of its own powers, exhibits a disposition to join hands with others, and each gains an enormous access of power by the union, the several "arts" ceasing their individual existence and coalescing into one "Art in itself." The same is true of every organism. Without rising to the lofty heights of science, or of art, in the ordinary studies of men, until the sympathy has been awakened knowledge and learning are but the dry bones of science; without inspiration life is barren, dull, and profitless. Mere facts strung together in orderly sequence are not

knowledge; they are not insight; nor are they interesting. We are not to suppose that we understand any prophet or teacher, or any person who has expressed thoughts worthy of study, so long as we have appropriated only his words and formulas, and have not united our will with his, occupied his standpoint, to labour in company with him towards the common end. It is this deadness of sympathy, the habit of resting satisfied with the dry skeleton for its own sake, the framework of philosophic thought, instead of seeking the active reality embodied in the formulas, that makes pedants of so many of our professors, and has dimmed the ancient glory of philosophy. Once we awake from our torpid dreaming, once we listen to the harmonious voice of Nature beneath the sects, we learn how Greek, Hindu, mediæval schoolman, how mystics, prophets, poets, priests, and modern science herself, have always told the same tale, that which "one day telleth another, and one night certifieth another; there is neither speech nor language, but their voices are heard among them;" or as a great man has said in our own time, not indeed in the lofty accents of the Hebrew, but in humbler language, befitting modern science, still speaking the same eternal truth: "The longer I live, the more I am disposed to think that there is much less either of pure folly, or of pure wickedness, in the world than is commonly supposed. . . . I have never yet had the good fortune to meet with a perfect fool. When I have brought to the inquiry the patience and long-suffering which

become a scientific investigator the most promising specimens have turned out to have a good deal to say for themselves from their own point of view. And sometimes calm reflection has taught the humiliating lesson, that their point of view was not so different from my own as I had fondly imagined. Comprehension is more than half-way to sympathy, here as elsewhere." Were science and theology always followed in this spirit philosophy might well be silent. These words so frankly spoken by one so well entitled to speak in the name of science, and one who, moreover, must be numbered among the most aggressive and intolerant of the champions of "truth," as the late Professor Huxley, show more forcibly than anything which I can say how, when once we put our personal interests and rivalries aside, and join with others in sympathetic contemplation of that Reality which all know and acknowledge to lie behind the outward form, we become aware that the truth is one; that even science and its ancient foe theology, if both be sincere and truthful, tell the same tale. The mind of a Huxley differs from one of a weaker sort, not in the kind or measurable quantity of knowledge over which it disposes, but in the fact that when the critical moment arrives and the vital issue is brought to the front, he will distinguish the real from the unreal, deliberately preferring the everlasting, universal inspired truth to his own personal formulas and doctrines. This is what makes a man great, and distinguishes the master from the mechanic; it is strength of

character, capacity for sympathy, not efficiency of the intellect; greatness lies in the man himself, not in the instrument which he uses.

The attentive student may follow each detail of any controversy; if he take the trouble to analyse the sophistical tricks, frauds, contradictions, misunderstandings which make up the eristic or controversial part of the discourse, he will find that they do not extend beyond the words, they arise from different concepts being denoted by the same word; or it may be from the manner in which the argument is presented; but always in the outer garment, while the thoughts themselves are always in harmony together, always at one; provided, of course, that they be honest inferences from adequate knowledge.[1] Such insight into the thought itself can only be gained by sympathetic understanding, the coalescence of the metaphysical side of our nature with that of each party, *through* the words, indeed, and the syllogistic form, which are the garment of the thought, roads by which the truth is approached, but not the truth itself; that cannot receive expression in verbal form. This is not mere empty theory. I should be guilty of a fraud against my readers if after all that I have said I were to try to tempt them with nothing better than a philosophical speculation, a new formula in the place of the old ones. The evil of resting content with the mere facts and

[1] I do not, of course, include in this genuine differences of opinion as to the best means of attaining a given end; such divergencies are rather a different estimation of probabilities than difference of opinion.

words of science is one that vitiates all our education, all our higher intellectual life, just as religion is vitiated by the pursuit of doctrines—opinions—as its final purpose. It begins in our schools, and is encouraged by our system of examinations. The young civilian on reaching India, the young English country gentleman or professional man after he has taken his University degree, puts books and studies as an irksome task, now, thank Heaven! past and done with, aside. The knowledge gained, the intellectual tone imparted to his mind, have no conceivable interest for him; all that he cares about is the letters appended to his name, enabling him to parade to the world that his parents have expended so and so much money to give him what is called "a good education." Nor can it be otherwise when facts are learned merely as facts, without any reference to their unity together, when no pains are taken to awaken the sympathy. Latin is learned as Latin, Greek as Greek; but who ever tries to initiate the young mind into the life and intellectual history of Roman and Greek, to show how the thoughts which occupied the intellects of their days, the problems, ethical, metaphysical, political, artistic, are yet before us, and bear an immediate and practical relation to the daily wants and duties of our own life; that Rome and Athens are repeated in London and Paris? that Prodikos still lectures for one drachma and for fifty drachmas, and that the popular value of learning is to this day rated by the money which has been paid?

Every one knows the differences which severed the ancient schools from one another—the opinions —but who will say how it comes that minds exactly alike in their anatomical construction are yet so different in their action? Until a school of philosophy has been studied sympathetically, it cannot be understood, and when we study, not this or that particular art, or science, or grammar, but *art in itself*, *grammar in itself*, all schools are found to be not different, but one.

One objection I foresee is likely to be felt to my extending the distinctively human qualities of sympathy and love to dead objects, and even abstractions. We need not trouble ourselves again with the question of life and death, which, after all, is purely logical, and depends upon the particular definition which we choose to assign to the word "life." However this may be, it surely cannot be said that human emotions, sympathy, and love, cannot be felt towards a place, a country, a home; or a work of art, a poem, a philosophy. Of course they can! And if towards them, then why not towards any object, animate or inanimate, provided that it be lovable? We do not only love that which we can embrace and caress.

My aim is not in the least to throw discredit upon the inductive habit of mind. Induction, or the establishment of general principles from particular facts, is another word for theorizing, and I am contending that the thought is prior to the induction, and has a different origin. Induction

does not initiate, nor does deduction prove; both are only processes which the inspired thought has to go through in the brain before it can become useful. Were the theoretical formula only a general statement of observed facts, it would be personal, and not universal; it would be regulated by the selection of facts, and so ultimately by the personal tastes and capacities of each individual. This is true of modern philosophical schools; they are human, that is to say, individual, and herein lies their weakness. For philosophy aims at universality, and approaches its goal just in proportion as the personal element is eliminated. The ancient doctrine that each man is a measure of the truth for himself is not altogether devoid of meaning; nay, it is within certain limits exceedingly helpful. But it virtually denies the existence of truth in the abstract, and absolute, whereas I am contending that behind the *opinions* which each holds, and must continue to hold for himself, in antagonism, if need be, to others, there does exist a divine, eternal Truth, not demonstrable, attainable by moral, not by intellectual means, not adequately, but only approximately expressible in words, often becoming falsified or degraded by its verbal expression; a Truth which is ultimately metaphysical, and is called Inspiration, or Revelation. And, further, I mean that this revelation is not confined to things which are artificially called "spiritual," but is both the beginning and the end, as well of physical science as of our daily life. For purposes of study, we may draw a

distinction between theology and science, and another between scientific knowledge and the *savoir faire* of our common life; but in their uttermost essence they are one; and we must not allow ourselves to be ruled by a conventional line which was merely drawn to aid the enquiry, but is now, for party ends, assumed to be final.

Ask the artist whence he drew his melody; whence that poetry which makes his work truly art. He cannot tell. It was a voice from somewhere. It was within himself, but how did it come to be there? Not from grouping notes or colours or thoughts at hazard and then choosing the best result. It came entire and living. Nor was it bound to any condition or mood, for it would come suddenly, inopportunely; or again refuse at sorest need; sometimes it would depart as abruptly as it came, irrevocably lost. In the studies and scribbling-books of great artists we may see the thought in its first garment, there caught and fixed like a spirit under a mediæval spell; labelled and classified, like the withered specimens in a museum. And if this is true of what we, by a most artificial distinction call Art, is it less true of philosophy, and all human effort, of which each individual art, doctrine, activity is but a single development, one phase or species, following the same paths, ordered by the same canons, learned by the same methods? The technical training which every artist undergoes is the best of all schools of method for culture; the goal of both is the same. The artist seeks

co-ordination of his movements, that brain, nerves, muscles, may all act together in perfect harmony and organic unity, so that he may do exactly what he wishes to do. He calls it colloquially, but quite rightly, freedom; and culture seeks in the wider sphere of human life just what the artist seeks in his individual art. Rules, moral maxims, philosophical formulas, however useful as helps to the learner, however conscientiously learned and followed, will avail nothing unless they are felt as the necessary outcome of the entire kosmos; the agent must feel that in bearing his little share in the whole, his heart vibrates in harmony with the chords of Nature around him.

We may now perhaps understand the strange dogmatism so often noticeable among men of the greatest originality. We never hear the truly original genius saying: "this is my opinion, the best I have to offer; yours may be right, and though you differ from me, we must agree to differ." Whenever a great man talks like this we may be sure that he is not sincere, but is only making a concession to narrower minds. Genius says: I am right; understand me if you can; or perhaps with Goethe: "only rascals are modest." That great and wise man, Samuel Taylor Coleridge, spoke of his own philosophy thus: "You may not understand my system, or any given part of it—or, by a determined act of wilfulness, you may, even though perceiving a ray of light, reject it in anger and disgust:—But this I will say,—that

if you once master it, or any part of it, you cannot hesitate to acknowledge it as the truth. You can not be skeptical about it." This is Table Talk, not sophisticated for the public; the words, however, are not those of an empty boaster, but of a man who knew what the truth is, who had seen it, and was not ashamed to say so. At first we feel surprised and hurt at such expressions, attribute them to vanity (*i.e.* "emptiness"!) or perhaps wonder at the egotism of genius. But surely such futile explanations can satisfy no one. It is not himself that the genius glorifies. Every genius, every one who has had an original thought, feels that it is something impersonal to himself; that it is a message entrusted to him; whence, he knows not—out of the depths of Nature's Ocean—of Mimir's well—and that he, his individual person, is but the channel of its communication. He knows the light which he has seen to be true; he loves it, and in his passionate sympathy he longs for others to see it and rejoice with him. This is not the vanity of the fool. It is Inspiration, understanding of Nature and of mankind; the deadly enemy of Reason, which is the servant of avidyâ.

But the single individual would grievously err if he supposed *his* will to be the sovereign ruler and creator. He is but one tiny centre of forces, a single ruffle on the surface of the ocean, to pass with the breath that brought it; Nature cares nothing for him. To comprehend her creative power, and to share in it, he must sink into her

depths, where individuality has become merged in the Oneness of the infinite Ocean.

Our view of the Will as a continuous presence, striving to actualize itself in life, finding its own ways, making its own instruments, while *our understanding* of these ways is secondary and accidental, will remove many difficulties, hitherto insuperable. We are no longer required to believe that the life of future generations really and in its inmost being is determined by the chance mood of a thoughtless girl. Mysterious forces are around us; when we watch the strange and apparently capricious unions arranged by men and women in reckless play and very waywardness of heart, our astonishment is but the measure of our ignorance of the impulses at work. It is at least a more dignified view of humanity to refuse to believe that Nature, the master-magician who knows so well how to preserve just those species which she needs in the face of every obstacle, and to destroy those whom she needs no longer, can leave the life of man alone to be the sport of chance, however artfully she may conceal her methods.

The steadfast faith with which religion has always held to a divine creation and government of the world; the artist's unshaken love of the beautiful as real and true, will not be put to shame. Nor is science discredited; all her splendid results remain as sure as they were before. When once the true relation between the physical and the metaphysical has been comprehended, priests and scientific men will cease to revile each

other; or at least the revilings will be left to the rank and file, the followers of Avidyâ. The usurped supremacy of science cannot endure. Even now, in the present age of darkness, many will refuse to believe such a miracle as that the bulk of mankind has for thousands of years been the willing victim of a conspiracy of priests, and that the "two and seventy jarring sects" alone possess the truth; the scientist and the philosopher with each his own tale of truth, which breaks down just when it follows the strictest logic.[1]

[1] For example, in the casuistry of the Jesuits. The extraordinary ill luck which has pursued this interesting Order—one of the very few associations of any antiquity which still preserves its honesty—is highly significant and philosophically important. Those who like to face the deeper problems and paradoxes of human life may take this well-established fact in connection with Nietzsche's *un*-categorical Imperative: *Learn to obey!*

## VII

## THE CEREBRAL MECHANISM

The problem of human existence, of the purpose and conditions of human life, has sometimes been regarded as an insoluble puzzle, and the world with all its questionable contingent of evil and suffering as an abyss which no mind can fathom. May not some of the difficulty have arisen from the subjective attitude in which the enquiry has been approached? To those indeed who would shatter the present order to bits "and then remould it nearer to the heart's desire" it must be conceded that we were not consulted in its creation; had it been left to our skill no doubt it would have turned out very differently. But as it is, we find ourselves stranded in a world which absolutely refuses to mould itself according to our wishes, constrained therefore to pursue the humbler task of adapting ourselves to its requirements, and each of us is furnished with a mechanism which, as no one can deny, is marvellously devised and wrought for this purpose. Let us see whether a study of the mechanism itself may not help us to understand its use. I have here only to do with its general

features, and shall avoid all physiological details which can only be studied methodically by special books, and are of little use for mental science.

The most general term for the science that deals with the action of the reasoning mind is *Logic*; but the term is often used for a certain theory of logic, which, as it rests upon the supremacy and self-sufficiency of intellect, is wrong. We know and may study logic through the medium of *Language*. We have in the preceding essays been repeatedly reminded that all the processes of the human mind are not properly expressible in the vehicle of language. The intimate connection subsisting between thought and words has led some writers to view them as virtually identical, or at least correlated, so that neither can exist without the other. This position cannot be maintained. In whatever sense we employ the word thought, the animal undoubtedly thinks; to some extent it even reasons; but it never speaks. The cries uttered by animals are not ordinarily communications of thoughts, and are not therefore in the strict sense language; they are, in all except a few rare cases, purely emotional. Language is an incident of cognition and by no means essential thereto. Knowledge *may* be capable of clothing itself in a verbal garment, and in general will do so if any useful end is to be gained; but this is not a necessary condition of its being.

A proper understanding of the nature of language is very essential. Though language is not the

necessary condition of thought, it is its proper vehicle, and reacts so powerfully upon it that man owes his superiority and command over the rest of creation almost entirely to its aid. In almost every common act of our lives we are altogether dependent upon it, as may be realized from the utter helplessness of those to whom it is denied. The true position of a servant so powerful, so necessary to our well-being, must be clearly defined and understood if it is not to become our ruler. Unfortunately it is not so always, and very few realize how completely we are all the slaves of words. I have dealt fully with the subject of verbal logic elsewhere, and have criticized the points on which I believe the modern orthodox view of the syllogism to be mistaken, and also sketched a theory of what I hold to be its proper use and purpose. Here I need only repeat very generally the substance of the principal conclusions at which I there arrived, referring my readers to chapters xi. and xii., and the latter part of chapter xv. of my *Essay on Culture* for their fuller treatment.

The syllogism is the form of that function of the mind which we call the reason, possessed in some degree by every animal that has a brain and nervous system, but so pre-eminently by man that it is supposed to mark him off from other animals. We need here only consider the reasoning process in man; with him it serves two purposes; it may be either *critical* or *sophistic*. It cannot discover or demonstrate truth, however it may seem to do so.[1]

[1] I may here observe that Aristotle, in his *Topics*, gives an account of

True judgment can only be established by direct observation with the senses, through the inner forms of time, space, and causality. That is to say, the object which I see holding its place among other objects, coming into being, enduring and perishing in uninterrupted sequence of time, and carrying out its action as a part of the causal scheme of creation, is certainly there, and is no delusion. There are, it is true, certain very exceptional cases where the senses themselves seem to convey false information. Such illusions are traceable to the admixture of reason with all sensible perception, but it is not my purpose here to enter into philosophical niceties for their own sake. The broad fact remains true, that the object which I perceive before me is a certainty, and it is the basis of all practical life. Whenever I wish to be perfectly certain of some existing fact, I do not draw inferences, nor do I trust to the reports of other people, but go to the spot where it is and convince myself by the evidence of my own senses. And if I wish to convince another person that something exists I *show* it to him. After the senses have declared there is, broadly speaking, no further doubt. Their evidence is the prime element of cognition, the raw material upon which my brain has to work, the first data of action. It

the purpose of dialectic (as distant from demonstration, or science), which is essentially the same as what I have called the critical use of the reason (see Grote's *Aristotle*, Vol. I. ch. ix. p. 391). It must be borne in mind that our Reason is not the same thing as Aristotle's νοῦς, but answers more nearly to what he calls Dialectic. Locke's criticism of the syllogism is from quite a different standpoint to mine.

is the only objective certainty which we possess. The inferences which my mind afterwards proceeds to draw from it are never certain, and are the cause of all the error and failure which mark my actions. They may be true, but I cannot say whether they are so or not until they have been verified by direct observation. Till then the inferences of the reason are not knowledge but Belief—that is to say, knowledge partly formed, not yet perfect; Probability of varying degrees, instead of certainty, which is absolute.

The positive syllogism (unless in the exceptional case of discourse in pure time and space, mathematics) suffers namely from an inherent defect in its form, inasmuch as the major premiss always necessarily presupposes the conclusion, and cannot be established without it. Whenever the syllogism has to be used as a method of enquiry, *i.e.* whenever we desire to arrive at a positive conclusion which is different from the premisses, the form must be slightly relaxed, the premisses falsified; either an undistributed term must be understood as distributed, or some other device introduced for which the delicate ambiguity of words will always afford easy opportunities. A very trifling adjustment often suffices to produce great results; but something must be done, or no progress can be made. Unless the premisses are tampered with in some way or other discourse remains barren, and will be felt at once to be meaningless and dull.

By this falsification of the premisses the certainty of the conclusion is overthrown. It is now

only a probability, the value of which can be calculated in the comparatively rare instances where the relative amount of truth and falsehood in both the premisses can be stated in figures. The effect produced therefore by the faculty of reason for its possessor is in the first instance greatly to widen the field of his knowledge, but at the expense of its trustworthiness. The animal, who scarcely reasons at all, can do far less than we can; but he does it with much greater certainty. The agent may, when certainty is unattainable, take action upon a probability, preferring to risk the chance of failure in attaining some wished-for end rather than give up the attempt. Primarily the stimulus to an action is a fact of the objective world, or, to put it accurately, a collocation of circumstances which the nervous mechanism perceives, *i.e. knows*, and lays before the will. But when the knowledge is not complete, when the collocation of circumstances is only inferred through a syllogism, not directly perceived, the will issues orders on a probability, a *belief*.

The syllogistic process, therefore, is not the rigid demonstration that our logical treatises make it out to be; it is eminently variable and adaptable, so as to bring the conclusion that is desired. In the manipulation of the premisses, in deciding the value of probability to be accepted as the equivalent of certainty, the issue is determined by the will. Such is the elasticity of the syllogism that we may, from the observed facts of nature, by judicious selection of the premisses, obtain the

most various inferences, inconsistent with and contradictory to each other, all resting upon solid logical foundations. From these the will selects which it pleases, and acts accordingly.

These remarks do not apply to the negative syllogism, the characteristics and value of which are quite different from that of the positive. A negative can be established by rigid reasoning, as we see from the familiar method of proof known in law-courts as an *alibi* where a negative, not otherwise ascertainable, is absolutely proved, provided the premisses be true. The negative syllogism is the form of the critical use of the reason; the positive of the sophistical.

Positive syllogisms from relations of pure time and space, *i.e.* mathematical deductions, are also entirely trustworthy. These are the pure forms of intuition, proper to the brain itself, and therefore free from the imperfections and contradictions which harass and destroy the purity of objective reasoning. And mathematical calculation itself loses its characteristic infallibility directly it becomes objective, by being applied to material objects. This need not detain us here; we have only to add that reasoning in pure time and space can only bring conclusions in pure time and space. We cannot infer the *existence* of anything from figures alone.

There is, however, one kind of argument in very common use where practical certainty may be obtained, even as to objective facts, from positive deduction. A single syllogism cannot bring

forth certainty, but only probability; but when a number of independent syllogisms, each with a certain probability in its favour, converge to the same conclusion, the probability of the common conclusion being untrue diminishes in geometrical ratio with each syllogism that is added. Evidently, then, under certain conditions, a very near approach may be made to certainty, or to an error = 0, and in this way the reason may be employed to establish new truths not otherwise known. The most essential of the conditions is that the different trains of reasoning shall be perfectly independent of one another, and from different premisses. Absolute theoretical certainty is never obtainable in this way, but only in some cases a very high degree of probability, and the practical value of the method is much impaired by the fact that we are not always, or often, able to determine the degree of probability of error even approximately, depending as it does upon a difficult and uncertain valuation, for which the data are generally wanting. Still, in the absence of direct information, its value is very great, and many actions of our lives are thus determined.

Of the sophistical use of the syllogism I shall have to speak hereafter. I shall be obliged to use the term syllogism to denote both the verbal statement, and also the physiological process in the brain, of which the words are a translation. The theory of logic can only relate to its verbal form, but it must always be borne in mind that the act of reasoning itself is physiological; when

conscious of the process we may, in order to communicate it to others, or to help our own thought, express it in language, but the two must not be confounded. We have now to consider the cerebral process, and I shall try to avoid all doubtful or disputable technicalities, the broad, well-understood facts being quite sufficient for my purpose. First, let us again realize that the human organism is a machine for converting an impression into an action, and here I repeat, for it cannot be insisted upon too often, that in this respect its function is exactly the same as that of every object in this world, differing from all others only in complexity and in the wideness of its range. Bearing it, then, in mind that the entire human mechanism performs a function precisely similar in its nature to that of each organ, even of each individual nerve-cell, namely, that of transforming energy, the whole presenting an exact analogy to a community of individuals, we see that the problem of biology is merely to show the processes of Coördination by which the actions of individuals are brought to unite harmoniously together to a common end, and produce the resultant action of the whole complex. The distinction drawn in Mental Science between conscious and unconscious acts, between mental physiology and psychology, is, in the sense intended, artificial. The whole, as well as each part, is animated by Will projecting itself physically as Will to act; we are not now concerned with anything except the projection and the means of attaining it. Consciousness is, for the present,

*i.e.* while we are considering the mechanism, an accidental onlooker; the actions of human life, both the "vegetative" functions of circulation, digestion, reproduction, and the higher (*i.e.* more complex) ones of teaching, buying and selling, artistic creation, all the things which claim our fuller attention, go on quite mechanically, by direct sequence of cause and effect, whether we are conscious of them or not. We shall, however, see later on the decisive part played by consciousness when its authority is needed. In considering the machine we have only to show that its causality is nowhere broken.

The perception through the sense organs of something in nature is the first impulse which sets the machine working. Every object is an aggregate of many attributes, *i.e.* many potential capacities for acting upon our senses, for imparting a nervous impulse. The impulses themselves are all of one kind; each nerve fibre does one thing, and that only; the manifold character of every perception is due to the numerous parts of which it is made up, *i.e.* the number of fibres in different positions engaged, all united together as an organism in the synthetic unity of apperception. Even the simplest impulse which affects the machine is an organism of extreme complexity. It is not, generally speaking, one attribute that is apprehended, but a complex of attributes. At the surface of the body the object, or complex of attributes, comes in contact, either directly (in touch) or through a vapour (smell) or else by the

emission of vibrations by some transmitting medium (sight and hearing), with a mechanism designed to receive it and report the observation to higher authority. Sometimes, when the conditions are of a very simple nature, and have often been dealt with before, the impulse is only transmitted as far as the nearest centre in the spinal cord, where a cell competent to deal with the matter sends out the motor impulse at once; *e.g.* if a pin pricks my foot, the limb will be immediately withdrawn without more ado; if a grain of dust lodges in my eye the tear-glands will discharge. But if the impulse have an important relation to the vital organs of the body, more especially if the conditions represented be new, and have not been dealt with before, reference will have to be made to the higher centres in the encephalon,[1] where it is elaborated more or less, as may be needed, by the intricate and powerful methods which we call reasoning, all strictly mechanical, in syllogistic form. Whether the action be reflex, determined locally by a single ganglion, or whether it be the final outcome of an elaborate, far-reaching process of reasoning, as in the schemes of a political intrigue, or a financial swindle, the end is the same—an action.

Let this be illustrated by a simile. Suppose a foreign ship to put into one of our seaport

[1] I purposely use this word instead of the commoner term brain, because, in my view, the brain, the governing organ, cannot be separated from the spinal cord and the entire nervous system; just as we use the term "Government" for every petty local official, so long as he acts in behalf of the central authority.

towns. Certain preparations have to be made for her reception. These are all managed locally; even matters of great difficulty, requiring technical skill, such as bringing the ship to her moorings, revision of her papers, etc., can be carried out by the local authorities, because they have done them a hundred times before and know exactly what is wanted. Now, suppose the trade of the port to develop,—no matter in what particular way, but so as to affect the general concern of the country—and to call for some action, in which many interests are affected. The matter will be taken up by the central Government; letters will pass from one office (or centre of action) to another; there will be discussions and debates, until at last, when everything has received due consideration according to its importance *in relation to the whole*, orders for suitable action will be emitted. Lastly, let us suppose that a war has broken out, and that instead of peaceful traders a hostile fleet has suddenly appeared before the harbour town. Now it is no longer certain interests, but the very existence of the nation that is threatened from this spot. The impulse is felt throughout the land; everything else is put aside, the entire attention of the Government is taken up with devising means to repel the attack; many actions, directed and co-ordinated together, are brought to bear upon the one point: the garrison of the town is reinforced; stores, ammunition, money, are sent; the nation is stirred to its remotest regions, and its whole

strength is put forth in the one act of repelling the invader. Often, if there be inherent weakness in the nation, it now shows itself; a panic ensues, and all is lost.

The three supposed courses of action differ from one another only in complexity, and in the importance of the issues involved. The first illustration answers to a simple reflex action upon a stimulus received, and the mental powers of some of the lowest animals generally do not extend further than this.[1] The second exhibits the process in all ordinary affairs of life which are not purely habitual, such as, to use the common phrase, "require a little thought." The third shows the action in circumstances of great and serious emergency, where in extreme cases the mechanism is liable to become deranged by the violence of the impulses. The antithesis between the individual wills of the parts and the will of the whole, the single resultant of the individual wills after they have coalesced together, is also evident.

We must now follow the course of the impulse after it has been referred to the central organ,

[1] Nevertheless we cannot be too cautious in attributing limitations to the mental faculties of the lower animals. The sea-anemone, for instance, will seize and devour a piece of meat, but will throw away a piece of moistened paper, displaying thus a distinct, though rudimentary, faculty of reasoning in syllogistic form. There are many well-known instances of reflex action in plants, which have neither nerves nor brain, so far as we know; for instance, the closing of the leaves of the sensitive plant, the phenomenon of heliotropism, etc. (Loeb, *Vergl. Gehirnphysiologie*). We must always keep it in mind that the essence of these processes lies deeper than that which we express in technical words.

the encephalon, for disposal. It is first classified, *i.e.* referred to a higher concept, already present in the brain, under which it may be grouped; and the classification is made directly with reference to some action that is to follow, the action being therefore held in view from the very beginning. It will be remembered that the impulse itself is of a very complex character. Even in the case of a simple musical tone, such as that of a flute, or a wide, closed organ pipe, which is perhaps the most elementary of all sensible impressions, several nerve-fibres are engaged in transmitting the impulse,[1] and in the perception of an ordinary object where a number of attributes, often very complicated, are united together, the complexity is incomparably greater. Any of the attributes, or, to be exact, any groups of them, may be selected to determine the classification, provided, they group under one already present, to bring forth an action. The classification, or, as it is often called, association, is believed to take place in the cortex or outer grey matter of the convolutions of the brain, but possibly the process of sifting commences in the other ganglia through which it passes in its course thither. After the association the current passes out again as a motor impulse to be co-ordinated with other motor impulses to bring forth a bodily action.

This process of Association, with the wonder

[1] Helmholtz, *Die Lehre der Tonempfindungen* — 1ste. Abth. Oter Abschn.

and beauty of which nothing else in the whole realm of nature can be compared, must detain us for a moment. First we have to enquire whence the store of notions which are brought to bear upon the perceptions as they arrive, the headings of classification, have been derived. I have supposed hitherto that the impulse on being received is immediately transmitted again as action; but this does not necessarily take place at once. For a large number of our impressions no immediate use can be found; a great many indeed are quite useless, and are at once discarded—we "do not notice," "pay no attention," etc. Others again are valuable, but not at once. These last are transferred to the record-room, the memory, to be ready when wanted. Every mind has a vast store of such past impressions in its memory; on the number of them, and still more upon their orderly arrangement, the intellectual value of the life very greatly depends. We call this store "Experience." The perception, before being stored, is stripped of all contingent and irrelevant matter; similar concepts are thrown into one; each is labelled and filed so as to be ready for use when an opportunity arises for employing any of them in the *effective* classification which precedes an action. The mental process, therefore, is purely mechanical, and consists in grouping a newly acquired perception under a wider concept drawn from the store of experience. The recorded concept is from its very nature simpler in its

constitution and wider in its scope than the direct perception, and the association depends upon the perception finding this wider concept into which it will fit, to which it can subordinate itself. In this relation together, with the smaller (particular) contained within the larger (universal), they form a proposition, judgment, predication, as we may choose to call it; and two such, with a common middle term following the familiar rules, constitute the major and minor premisses of a syllogism, from which the conclusion emerges —perhaps after passing through further syllogistic processes—finally as an order to the motor nerves, an action.

It will, of course, not be supposed that the matter is quite so simple as I have represented it in this mere outline sketch. What I have spoken of as one consists of numberless processes, carried out in great detail, but always in the same form, namely, that of a lower concept ranged under or subordinated to a higher. It will be observed that I do not adhere closely to the distinction often insisted upon between the perception and the concept, since the two insensibly fade into one another. But the line is very marked between the living picture of the object when it first reaches the senses, and the simpler but more or less imperfect concept that remains after the sensual impression is gone. Alone the perception is a mere nothing; an element, a brick; when ranged under another concept in a judgment or predication, it becomes active and useful.

The motor part of the organism is that which receives and executes the orders for action; but it must not be pictured as a different part of the mechanism to the sensory. The nerves that carry the messages to the outlying muscles are known to be different from those which bring them in, and even in the brain itself certain organs may be entrusted more especially with the business of gathering in the messages and others with that of sending them out; but in general it is essential to understand that each individual ganglionic cell is both sensory and motor, afferent and efferent, just as in a battery each element is both positive and negative. The great function of the motor side is the *Coördination* of the outgoing currents, so that all the various orders for action may be so fitted and adjusted to each other as to bring forth an action perfectly adapted to the end in view, harmonious in itself and free from jarring discords which indicate waste of power. Regarding this process modern physiology can tell us very little indeed. We know to some extent the regions from which the different motor impulses issue, but not how the orders to different muscles are so blended together as to result in a single action. When this is *fully* accomplished we have the perfect grace and harmony which mark the movements of animals, but so rarely the actions of men, and this is meant when we call an action *Artistic*.

Those who find difficulty in believing that the human mind is so entirely mechanical as I have represented it to be, may reflect upon the curious

phenomena which result from long-continued action, especially among those who are not accustomed to use the higher faculties, with whom the conducting fibres are, to use a metaphor, nervously less supple and elastic. The smallest alteration in the course of their habitual actions, however harmless, or even advantageous, it may be, is extremely difficult to them. We are astonished when we hear of starving peasants refusing to eat good soup, because it is thickened with barley; similar cases are within every one's experience; but our astonishment merely proves how little we understand the working of the mind; we cannot, in spite of all evidence, believe that it is only a machine. Even more decisive is the phenomenon strangely called "absence of mind," when a part of the machine is engaged upon a difficult task, needing all its energies, some subordinate portion which has been shunted off for the moment, and is lying idle, starts working on its own account, showing conclusively that the mental mechanism is entirely autokinetic. With the mind as with people, if we wish really to understand their motives we must not credit their declared statements, but must try to observe them unawares.

However difficult these marvellous processes may be to follow and comprehend when explained in language, they will become clear if they are considered by the light of the analogy which I have already used several times, namely, that of an organized community of men, where all the processes, sensory, deliberative, motor, find their exact

parallel. We have only for ganglionic centres to read "office" or "place of business," for concepts of experience "records," for nerve-current, afferent or efferent or associative, "message," "letter," "telegram," etc., and all will be clear. One phase of the motor machinery needs passing mention, namely, the Inhibiting. So far we have only regarded an impulse as producing, in the end, an action; but the result of its conversion may be to *prevent* an action. That is to say, the positive act ordered by one set of cells may be countermanded and overruled by another. This will be best understood from an example. I am making myself some tea at the usual hour, and the natural resultant of all the currents of perception when I see the cup of tea ready before me would be to drink it. But I notice in the water a curious blue tinge; the notion of poison at once inhibits the act of drinking. A common and more familiar example would be if I wished very much to go to a friend's party, but refrained from doing so from the fear of meeting there some person whom I disliked.[1]

In this sketch of the action of the human mind we have found all the material to be drawn from the objective facts of the outer world, and the old *dictum, Nihil est in intellectu quod non prius fuerit in sensu,* is one of the foundations of logic. All science which has no firm root in objective nature, as apprehended by the senses, is vain dreaming, and the teaching of it dangerous hypocrisy. Behind the entire process sits invisible the sovereign

[1] See the Appendix to this chapter, on positive and negative Cognition.

Will in its divan, present everywhere, touching one key and then another, now allowing an action to flow its course, now inhibiting; thus creating the active life of the individual out of the material of its perception. For the subject, the Will, is decisive as regards each mind. By its power of acceptance or rejection, it decides what those Universals of experience shall be; and can accumulate just that experience, just those principles which shall cause the mind to act in accordance with its own definite bent. Even in the single perceptions, the minor premisses that determine each action as it occurs, the will directs the attention to those in which its interests are concerned, those which it chooses to follow, and neglects those that have no part in its mysterious being.

Where now is room to be found in this scheme for our cherished watchwords of logic: Truth—Thought—Principle of Contradiction? We need these terms no longer, as expressing any exact technical notions. They are terms of an effete sophistical logic. They may still sometimes be useful, but they are not the necessary elementary notions of the mental process. Supposing I were to assert that a certain business would be much benefited by following some particular line of trade, but that the Board of Trade does not allow it; were I to begin talking about a "Principle of Contradiction," men would not understand what I meant, but would take me for a dreamer. The true fundamental law is not that of Contradiction,

nor that of Identity, nor any other logical shibboleth, but the principle of Subordination, which does indeed pervade the mental process throughout and regulates its action, as it does that of all nature. The lower is ruled by the higher, the part by the whole; this is the key to the scheme of logic and of creation, and is paramount.

Logic propounds to itself the questions: What is assent? What is belief? and is satisfied if it finds a belief expressed in words—nothing doubting that men's words are adequate expressions of their "thoughts," and taking these as its end, like Faust's *famulus*, who

> "Mit gier'ger Hand nach Schätzen gräbt
> und froh ist wenn er Regenwürmer findet."

And as to Truth: "True" is that which is drawn from the realities of Nature. Undoubtedly the purity and genuineness of the raw material is in thought as in all manufacture a thing of the utmost importance—because otherwise it will not *work*, *i.e.* will not bring forth what is needed. Truth is subordinate to efficiency, and the first requisite of a concept is Relevancy.

Marie Bashkirtseff in her Journal relates how once she had fallen into some trifling indiscretion with an admirer. On the next day she philosophizes thereupon, wondering how it could have been possible. She, the proud, the severe, the haughty! *she* to allow such a liberty! "he will think I have often done it before!" Here her philosophy is at fault. Perhaps he will think so;

but wrongly. No ideal presentation is necessary: the machine has merely done what it was constructed to do, and will do the same again when the inhibiting conditions are again removed. The remorse which in a noble nature follows a false step, is the repair and strengthening of the supports where they have proved weak; a painful and laborious process, because it means one step higher, one still further refinement in the sensitive mechanism already refined and perfected far beyond our comprehension. The contemplation of the mechanical working of the apparatus from cause to effect, impulse to action, in every phase of human and animal life, is the source of our keenest pleasures. It seems incomprehensible, miraculous, and indeed so it is. We watch the geese walking to market at a given hour once every week, all alone, and wonder how it is done; seek some "motive" impulse in the environment. Yet we hear the clock strike the hours faithfully at the right moment, and think we know quite well how *that* is done. Should a goose do less than a clock? How does the newly born puppy drink without having been taught? how does the spider spread its web, calculating its figures and stresses with perfect accuracy, solving mathematical problems which would tax the powers of the most highly trained engineer? How does the bird build its nest? Because each is a machine constructed to do it just in that way. From beginning to end, from highest to lowest, the stars, the tides, the habits of animals and plants, rivers and

valleys, the tempests of the sea and of the mind, the human mind itself and all that it beholds, all are through and through calculable mechanical causality.

---

## APPENDIX TO VII

### ON POSITIVE AND NEGATIVE COGNITION

We must be careful in distinguishing between positive and negative, both in the logical side of the mechanism (afferent currents and mind) and in the dynamical (action; efferent currents and muscles). The canons for both are:—

I. A positive can produce either a positive or a negative.

II. A negative can only produce a negative.

In the theory of the syllogism they become:—

I. A positive premiss may be followed by either a positive or a negative conclusion.

II. A negative premiss, *i.e.* one of which the copula is negative, can only be followed by a negative conclusion.

In the *alibi* or negative argument the distinction between major and minor premiss is not clearly defined. One must be positive, the other negative. The union of the two must therefore by the above canons bring a negative conclusive:—

Major: London is not in Glasgow (negative).

Minor: The accused is in Glasgow (positive).

Conclusive: Therefore he is not in London (negative).

In dynamics the canons are:—

I. A positive impulse may either produce a movement or hinder one already existing.

II. No action can come into being without a moving cause.

In nature the negative does not exist; it has its seat in the mind; it indicates something which the machine cannot do. All perception is positive. An object is an aggregate of attributes, each producing a positive impression on the sense organs. When any one or more of these attributes which for any reason I am accustomed to regard as necessary to the completeness of the group is absent, I use a negative word to express its absence. But this is a mere mental abstraction; the impression is just as positive as before. It follows that: (1) A negative term must always have relation to some other positive. (2) A negative argument can only be relative to some previous positive argument; it never exists on its own account solely. Its function is to criticize; it may destroy the positive discourse to which it is opposed, and if it succeed in doing so the whole argument falls to the ground; if it fail the positive conclusion remains valid. The final outcome of the reasoning process, that which has to be laid before the will for its approval, before passing into action, is either positive or nothing at all. There are not two distinct kinds of result, positive and negative. Similarly with the nervous motor mechanism. The nervous impulse which is the final outcome of the syllogistic process in the brain is always positive. Its contradictory is not a negative, but no current at all; there cannot be negative action.

There are certain nerve-fibres which have a purely inhibitory function, *i.e.* they prevent an action which would otherwise be brought about by some grouping of other motor currents. But the force which they exercise is a positive force, made strong enough to bear down the opposite impulse. In general, however, the inhibitory currents are not entrusted to special nerves, but are carried on by groupings of the ordinary fibres exactly like those which carry the impelling currents, only passing to opposing muscles. Inhibition is only a further continuation of

the principle by which so much of the mechanism of the body is sustained, that of opposing forces maintaining the body or limb upon which they act in equilibrium, and it is thus that the finer adjustment and regulation of the parts is effected. An instance is that given in the text, where the signs of poison inhibit the eating of food. The continuation of life being the condition of all other actions, the will for its preservation is superior in authority to all other considerations, and overrules them when they come into conflict.

Hence the necessity for recognizing the true nature of those words which express negative concepts; many of the most familiar of them are not commonly recognized as negative at all, such as "chance" and "freedom." Whenever any of them are assigned as a moving cause, we may at once detect a sophism. The real cause is elsewhere, and there is a desire to conceal it.

I think it would be possible to show that Evil, Pain, and Disease are in strictness negatives; but the discussion of this would lead us too far into the region of speculative thought, and would in the present state of our knowledge be not only useless but—like all irrelevant matter—very dangerous. Great mischief has been wrought before now by similar views when taken up and exploited by unscrupulous people.

## VIII

# THE ABERRATIONS OF THE MECHANISM

Under aberrations I intend to denote all irregular and improper working of the machine; all action which is not directed to the end for which it was constructed, the furtherance of the moral purposes of nature. It will be noted that I have here introduced a new concept, that of morality, the meaning of which I shall not be able to explain in these Essays. In philosophy, as in life, we begin by taking morality for granted; we see that nature does work towards an end, to which we are perforce obliged to submit, but which we are for the moment not able to question.

The diseases of the mind have been said to be two: insanity and ignorance. The latter is not a disorder, although it is commonly treated as if it were. There is no moral duty to acquire knowledge; the natural impulses of each individual infallibly drive him to acquire and store as much as the circumstances of his life permit; he may acquire very little, while yet his mind may be in efficient working order; just as a factory may be

thoroughly well-appointed, and yet unable to work up to its full strength from inability to procure its raw material. Insanity, being a total break-down of the machine, belongs to medical rather than mental science; but there is another very important disorder, in some respects allied to insanity, and so widely spread that it is no exaggeration to call it the scourge of civilization; in our large towns there are scarcely any who do not suffer from it in one form or another—Hysteria.

I include under this term not only the familiar and Protean disease known in medicine, but also all those irregularities of conduct in both sexes which are pathologically closely related thereto, and are commonly comprehended under the general term *nervousness* or *nervous irritability*; every case, in fact, short of insanity, where the causal sequence appears to run irregularly; where the effect is disproportionate to, or incongruous with, the cause. "Losing one's temper" is a good example of hysteria entering so suddenly as to cause an explosion; but there are other irregularities more subtle than this, more insidious, because less violent—caprices of mood and humour, constitutional timidity, morbid emotion, especially the hateful form of it known as "sentimentality," where the emotional stream gushes forth without intellectual control on insufficient cause, and without leading to action (*Schwärmerei*), besides much more which few would be disposed to class as pathological; further, the numerous forms of "religious" craziness, and its common companion,

sexual imbecility of every kind, fall within the same category. The phenomena are too familiar to need detailed enumeration; the word "hysterical," as it is popularly applied to actions and emotions, exactly conveys their character. Hysteria is generally accompanied with some disturbance of the bodily organs, especially the stomach or the intestines, and is then sometimes called dyspepsia. The essential feature is that the bodily disturbance is secondary; it is the product of the nervous aberration, and not its cause.

Suppose a machine, or scientific apparatus, extremely complicated in its action and adjustments, finished to the very last degree of refinement and delicacy achievable by human skill. Every bearing is a burnished jewel; electric and magnetic forces are brought to interact with gravity, balancing each other with such nicety that a minute impulse from a particle of dust or wave of radiant energy will pass through every joint and lever with accurately calculable momentum. The machine will have been devised to produce determinate effects from given causes; a task of no small difficulty will be to preserve its delicate structure from undue influences, impulses other than those for which it is constructed; it will be kept in a room by itself, perhaps under glass, and standing upon a special foundation. When any such inadmissible impulse accidentally strikes the instrument, for example, from the breath or bodily heat of some one approaching, or from any kind of shock, the effect will be to give a jar to the

organism and throw it out of adjustment, in consequence of which it will act irregularly, perhaps becoming for a time slightly deranged and unreliable; as when an old and well-kept violin after being touched by a bungler will for a time no longer respond to its skilled master; as a well-bred horse when backed by an awkward rider becomes restless and fidgety.

Such a mechanism, but a thousand times more sensitive and exquisitely wrought than any made by hands, is the human brain and nervous organism. Behind it lies the vast ocean of Will, pressing onwards with resistless force, striving to project itself. So long as the adjustments are perfect the nervous current can only flow just to the extent that is called for by the circumstances around; but should at any moment, owing to some weakness of a part, or to a shock from without, too much nervous force be admitted, there will be irregularity, perhaps an explosion, or violent jar; the action will be diverted from its proper course, and having once gone astray will not return to its regular paths until time has elapsed and the parts have been repaired. There is, of course, no breach of causality; actions still follow from the impulses; but co-ordination is lacking; they are not such as the mechanism is contrived to bring forth. This is the irregularity of conduct which we call hysteria. It is frequently accompanied with nervous twitchings of the limbs, marking the leakage of nervous current into unauthorized channels. When we consider how the artificial stimulation of one

nerve will cause a muscle to contract, that of another a gland to secrete; how one nerve centre raises the temperature, another fills the urine with sugar, etc., etc., it is easy to understand how these hysterical aberrations of currents may bring forth the symptoms of almost any kind of disease, which then appears to be simulated, because no functional derangement can be traced.

Two conditions are especially favourable to such irregularities; first, excessive force of the individual will; secondly, extreme delicacy of the nervous constitution. This is entirely confirmed by experience. Hysterical subjects are not usually those of dull mind and feeble undecided character. They are more often to be found amongst the intellectually gifted, the heaven-storming geniuses, in whom the mighty will, vainly striving to find the vehicle of its expression, threatens to burst its bonds, too often, alas! ending by breaking through all control, in reckless, headstrong self-will defying alike the laws of God and of man, finally shattering the too delicate mechanism in the shipwreck of insanity.

By such considerations we are led naturally to the remedy, which, as it lies out of the proper course of this treatise, I shall only touch upon very briefly. There are, in accordance with the two principal conditions, two ways of combating the fearful malady. The first is to remove the mental strain, especially to give up the town life, with all its multitudinous, fragmentary, distracting nervous stimuli. The other is patient self-control.

The will submits to no authority except its own; but it can control itself if it resolutely set itself to do so. The object which men have to strive after is not to grasp at everything, whether within reach or not; but to establish a due equation between the will and the mechanism, that what the one desires the other shall be able to supply, whether it be much or little. Then there is inner peace, efficiency of the organism, harmony, grace, restfulness of action, which are the summit of power. By regularly keeping in abeyance the distracting, hysterical desires, not by occasional checking, but by systematic mortification of them, the will itself at last brings forth the mechanism needed, and will not fail eventually to achieve all that it really and permanently desires. Those who suffer patiently are not hysterical.

Hysteria is a disease or weakness of the mind itself; the aberration which I have to speak of next is not properly a disease, but rather a misuse of the mental mechanism; I mean Sophistry, which has been truly called the contradictory of philosophy.

Dr. Draper, in his *History of the Intellectual Development of Europe*, observes how there comes a period in a nation's life when, after the search for Truth has proved unavailing, one formula after another has been tried and found wanting, men's minds become unsettled, and they begin to doubt the very existence of truth. The eminent writer points out in very impressive words the extreme gravity of the crisis in the intellectual growth of

the nation, leading, as it inevitably must, unless recognized and checked, to intellectual and moral perdition. In its philosophical form it begins with the plausible and insidious axiom that every man is his own measure of what is true.

We have learned that the first essential of a doctrine is not truth but relevancy. The doctrine which I have quoted is incontrovertibly true. Directly we rise above the simple facts of perception, scarcely a single statement can be enunciated which is not true under certain conditions, untrue under others; and each individual agent must select for himself how he will accept it, having regard to the circumstances and his own character. In other words, he is his own criterion; he is responsible for his own opinions.

What effect can such a doctrine as this have upon our lives? There can be only one, namely, the complete destruction of all the foundations of our intellectual and moral life. Each is to judge of the truth for himself; one man's judgment is as good as another's; the eternal, absolute, universal Truth is a fiction of philosophy; then away with it! away with philosophy! Religion is another lie, invented by priests; away with them too, and with the thing in which they traffic! Instead of Truth we will now have Opinions. Each man's God is himself, and no other shall he worship!

And so life, instead of being a resolute, enthusiastic struggle for an Idea; for a light which we see steadfastly burning amidst the tempest of avidyâ, a light which in its radiant beauty we love,

and trust to lead us always upwards, is frittered away in the pursuit of one bubble after another, any formula which at the moment we hold to be true, and think will bring a fleeting happiness.

We saw in the third study that philosophy has to deal with Being, Cognition, and Language. In its next stage philosophical sophistry deals with all three in the same way: it denies them all. The earlier doctrine was represented in Athens by Protagoras; the later by Gorgias, who directly enunciated the three theses:—

1. Nothing exists.
2. If anything did exist we should not know it.
3. Even if it could exist and we could know it, we could not state it in words to another person.[1]

In modern times the doctrine of Protagoras is called "Freedom of Thought." The creed of the scientific man is called "Agnosticism." If he has not yet formulated it quite so categorically as Gorgias, it is from want rather of philosophical perspicacity than of conviction.

There are some things which all know to be true, which no sophistry can refute; and one is that when philosophy and religion are gone; when logic has been prostituted to serve the paltry greed of men, law will soon follow. And when the national life has been sapped the people of a nation will sink into imbecility and folly.

In the creed of sophistry truth is not an inspiration but an inference from a syllogism, and

[1] Ritter und Preller, *Hist. Phil. Graec.*, §§ 236–238.

relative. Dialectic is a game, and its end not truth or knowledge, but victory. Reason is made self-existent, and now may be seen the admirable efficiency of the great engine of sophistry. The many possible ways in which the syllogism may be wrongly turned—"fallacies of reasoning"—have been enumerated and classified sufficiently often by others; but there is one which from its universal employment in positive syllogism seems to me to outweigh all the rest in importance, namely, that known as the error of an undistributed middle term:—

Every A is B,
Every C is B,
*therefore* Every C is A.

It really is a confusion of the subject with the predicate in supposing them to be interchangeable. At first sight it is difficult to conceive how such a transparent device could possibly deceive any one; nor could it do so if we really were in the habit of logically examining the statements we hear and utter. Sophistry is a game of skill in which we are all engaged, trained from earliest childhood in its moves, until even its conventions have become a second nature to us. The last appeal is to the will, and if society at large wishes for sophistry, then the convention of undistributed middle, however flimsy it be, will be admitted to pass unchallenged.

Some common instances of this form of sophistical reasoning may be worth mentioning. It very

commonly shows itself in an accidental attribute being mistaken for essential, as when a person apes the forms and etiquette of high society, thinking to pass for well-bred. A certain young man, being struck with the popularity of Thomas Carlyle, once set himself to copy Carlyle's style of English prose, doing it with some aptitude, fully persuaded that he was writing Carlylese. One very usual and dangerous form is this: It is a common observation that great minds, especially in their youth, while their struggle with the technical expression is still severe, in dissatisfaction with their environment, give way to defiant vituperation of the world, mankind, and all existing institutions, as a young unbroken horse generally begins by kicking out his heels. With the truly great such querulousness is an accidental passing phase; but the smaller man mistakes it for an essential mark of genius, and copies it that he may be thought, and may think himself, clever. All these are instances of wrong syllogizing, resorted to to make up for the deficiency of real strength.

The ambiguity and elasticity of words is an inexhaustible source of sophistry. A device equally common with the last, and, though belonging to a higher intellectual stratum, not one whit less sophistical, is that of misconstruing the words of an opponent. This is especially easy when the opponent is a party, for some of the party formulas and watchwords, emanating from the body of the people who are not skilled dialecticians, may be loosely expressed, and quite able to bear a

construction other than that intended. The device lies virtually in setting up a theory which no one ever seriously entertained in order to knock it down again. It is very commonly employed by scientific men when they turn to their favourite hobby, theology, and may be well studied in some of their writings.

It should be remembered that *no* unverified positive reasoning (other than mathematical) is trustworthy. It may lead to a hypothesis, but not to a proved fact; and if it ends in a categorical assertion, it is always sophistical. However well established the premisses may appear to be, the conclusion is unsafe, though not of course necessarily untrue. The canon of logic accepted as orthodox is that the conclusion is certain provided the premisses be true; the right doctrine is that true positive premisses bring no conclusion at all; some sophistical artifice *must* be introduced to arrive at any new result. A proposition may be perfectly true and incontrovertible in itself, but it does not follow that every deduction that can be drawn from it is true, or that every action based upon it is healthful.

By one of the devices named, or by some other process of falsification, the skilful reasoner is generally able, not only to *prove* practically almost any inference which he chooses to draw, but often even to make it appear like the truth to the vitiated mind of the hearer, steeped in false and sophistical logic. The principal task, therefore, of the sophist is to get the argument into his own

hands, to gain the lead, so that he may bring out the syllogism that he wants; and to prevent his interlocutor from doing so. All the well-known manœuvres of sophistry, so admirably *persiflées* in the first book of the *Republic*, are directed to this end, and there is not one artifice of Thrasymachos which is not practised every day in modern social conversation—at the family dinner-table, in regimental messes, in the converse of lovers, in the play of children. Literature, art, trade, are saturated with the poison; politics are nothing else. The sophistry, in battle against which Plato lived and Socrates died, has become the breath of modern life. But perhaps I go too far. One region occurs to me into which the taint has not yet entered—the cricket and football fields of England. And so long as our English youth continue to be trained in the playground to say what they mean, to do what they are told, to unite together to a common end, and meet their foes in straightforward and honourable strife, utterly despising all unfair play, meanness, spite, and unworthy self-interest, intent only upon doing the duty before them to the utmost of their power with joyful enthusiasm, our educational doctrinaires and examination committees may do their worst in the schoolroom.

There is but one refuge from sophistry. When the syllogism fails the inspired creative Idea may enter, revealing the unknown, and impelling vigorously to action. To know the Idea, moral, not intellectual, qualities are needed. It is not gained

by Reason, but by Faith, Earnestness, Greatness of Soul. The sophist is essentially a little man, a coward; his shifts and theories and meaningless talk are the offspring of his fear to accept a great and bold impulse. But let us beware of despising him. The fault of sophistry lies not in the individual but in society, and in the false education which it imposes. The immortal soul breathes in every man; the most abject sophist may find his ground; he may yet grasp an Idea and become a hero.

In the list which I will now give of sophistical devices, gathered by degrees from my own observations of men and women, it will be seen how the immediate purpose is generally to gain the lead in the discourse, or else to snatch it from the opponent. The fault spoken of by Aristotle in the 6th chapter of the *de Sophisticis Elenchis* as deceiving, not only the ignorant people, but "even the scientific," is clearly the same as what I have classed as the undistributed middle term. Modern commentators think that it shows a strange want of intellectual grasp among philosophers of Aristotle's day that they should have been taken in by such a device; but they do not seem to observe that the very same argument is in quite common use among scientific men, as well as others, in our own day. When a chemist infers that because oxygen, air, etc., can be liquefied by pressure and cold, therefore hydrogen can perhaps be liquefied in the same way, he is using a syllogism with undistributed middle, and

it is not necessarily erroneous. The error is when it is supposed that this, or any other kind of syllogism, can *prove* anything positive. It can only indicate the way; the proof then follows in the verification by actual trial. When the argument is used with intention to deceive, it is sophistical.

The sophistical tricks which I have found most common are:—

1. Ridicule. It may be used in many ways; the grossest is when several people league together to laugh an opponent down (*Euthedem*, 276 B, D., etc.). Supercilious affectation of superiority, of pity or contempt for the opposing argument, are of this kind. The end may often be gained by putting an irresistibly comical question ("Socrates, have you a nurse?"). Generally useful with a weak opponent, who is likely to become irritated, and so be misled into hasty tactical mistakes.

2. Reply with another question, instead of answering. Very effective. The object is to divert the course of the argument when it is becoming inconvenient, and to regain the lead.

3. Requiring an answer "Yes" or "No" to an ambiguous question (*Euth.*, 275 D.). Demanding an immediate general definition of any term (*Republ.*, 336 C.).

4. Leaving the company when hard pressed (*Republ.*, 344 D.). This is a very dangerous move, for it is apt to have the appearance of an acknowledgment of defeat; but I have

sometimes seen it done with admirable finesse, and it may then be very picturesque.

5. Quoting the words of an opponent without the context, or with a different accent.

6. Fastening a term which has a disparaging, or else a eulogistic, meaning (as the intention may be) on to anything, as for example the scientific man's use of the word "prejudice." An instance is the modern misuse of the word "amateur," where a person who works for love and not for pay is confounded with the smatterer and charlatan. Political catch-words—"Peace with Honour!" etc.—are all of this kind.

7. Overbearing or abusive language (*Republ.*, 336 C.). The lowest kind of sophistry employed by the German press, as when an adverse notice of a great French artist begins by describing her as "a Frankfort Jewess."

8. Lengthy speeches. A favourite method, as it enables the sophist to prolong the enjoyment of his opponent's discomfiture.

9. Stating the premisses only, and allowing the conclusion to be silently drawn by the hearer himself. The high art of sophistry; in skilful hands its power is inconceivable. The method of converging syllogisms may here be applied, and the argument continued through days, weeks, years, without once the conclusion being stated or suspected; while the sophist still retains the power of repudiating it if necessary. This is how character is undermined, and good fame ruined. Example: Iago and Othello.

The list is, of course, not exhaustive; many sophistical devices are too subtle to be enumerated. The essence of sophistry is that the true purpose is some other than that which appears in the argument; it is kept concealed, and the connection between it and the subject of discourse is only indirect, as we find it in modern life, whenever we pass beyond mere statement of verifiable fact.

# IX

## ROUTINE AND GENIUS: THE UNSPEAKABLE

THE frank and unreserved acceptance of the strictly mechanical and autokinetic character of the entire physical world, including the human brain, will clear the path of many difficulties. The first duty of all who are really seeking for knowledge must be to understand and adopt the results of those who have gone before, to utilize them as a foundation to build upon, so far as they are securely established, and are not the baseless speculations of self-absorbed dreamers, interested to establish a theory for its own sake. The great lesson which modern science declares with full and justifiable confidence is that throughout nature the web of physical causality is continuous, and nowhere broken; and that the human mind, the instrument of human action, with all its subtle intricacies and marvels, forms an integral part of its texture. This view of universal causality is not proved *à posteriori*; many are the threads that have not yet been traced; some, such as the phenomena of hypnotism, covering large fields,

and of deep importance to human affairs. It is a transcendental truth, and no one can read science at the present day without noticing how firm is its step along the ground of causality, and how fully justified is the confidence with which it reckons from cause to effect with absolute certainty of arriving at its end. To ignore this, to try and explain away causality, to treat the continuity of the Universe as a negligible element, is to take away the very life's breath of metaphysics; for though metaphysic does not rest, as a human science, upon the physical, yet it only lives for us in the physical; and when writers of a philosophic turn, in their desire to save theology, think to serve it by trying to indicate some breach in the causal tie, some imperfection in the lovely form of Nature, they are dealing a deadly blow to theology itself in its weakest point, namely, in its antagonism to science, where, since the days of Bruno and Galileo, it has been powerless. The most dangerous enemy of truthful theology is not truthful science, but the passion of men for miracles, as Jesus Christ Himself knew and said (Matt. xii. 39; John iv. 48). We need no assumptions contrary to common experience, but directly postulate the continuity of all physical things as one of our most vital conditions. But it must be distinctly understood that the automatism of the kosmos resembles that of the steam engine; it only continues so long as the will, which called it into being and watches its action, permits. The will is no part of creation, but is all Creation itself; it is present

everywhere and continually. It is not, like the νοῦς of Anaxagoras, a mere initial cause, once starting the mechanism of the Universe, like a wound-up clock, and leaving it to work of itself; but is everywhere fully, animating every action in causality. Without it the action of the whole physical world would instantly cease; for it is itself the world; what we see is only our perception. The *à priori* proof of the impossibility of perpetual motion, and consequently the proof of the Conservation of Energy, is that there is no will for perpetual motion, but only for expenditure of work, or useful action.

Let us now follow the mental process step by step in a familiar example. Suppose that I am in a new neighbourhood, and want to find my way across the hills to some village. My friends give me a series of directions, to go along a certain path; at some point to turn into the valley to the right; at another to cross the hill to the left. Each of these directions is a major premiss which I pigeon-hole in my memory for the moment, until the proper minor occurs, the actual perception of the points named where I am to turn. The way being new to me I have to keep my attention very carefully fixed all the time, and am fully conscious of each successive application of minor to major, "Turn to the right at the chalet" (major); "This is the chalet" (minor); "Turn here to the right" (conclusion), transferred to the motor mechanism, the will assenting. So long as the way is new to me my consciousness is fully engaged, and if it

flag, or turn to anything else, I shall go wrong, *i.e.* some needful part of the motor impulse will go astray and fail. But after the act has been repeated several times, and I know the way, the impulses begin to issue more and more *unconsciously*, until very soon I am able to find the way without thinking about it at all, or even whilst engaged in deep thought about something else.

The conscious and the unconscious glide insensibly into one another, and it is evident that the mental processes and courses of the nervous currents, *i.e.* the movements of the machine, are the same in each case, since the same impressions have to be converted into the same actions whether I am conscious of them or not. Even if we suppose the higher centres of the cortex to be shunted off, and the main part of the process to be transferred lower down, towards the spinal cord, still the general course of the action is the same, and the connections with the conscious centres remain ready to be instantly called in when required. For suppose a mistake to be made, or some hindrance to occur in the unconscious action, *i.e.* some current to get into the wrong channel, or fail to act, as for instance if I inadvertently miss the road, or find it blocked. New and comparatively complex conditions now enter; immediately I am "all awake"; consciousness quickly returns, and I make strenuous efforts to recover the lost clue: "Where is the chalet?" When that is found the mechanism starts afresh by itself, and I turn my

mind to other things. A constant play is kept up between consciousness and the nervous mechanism, the former never entirely withdrawing its supervision even when engaged elsewhere, but returning from time to time to see that all is working well. What we have here to lay stress upon is that *the mechanical processes are exactly the same when consciousness is present as when it is absent*; all that the conscious will does when it interferes is to rearrange the currents that have become disordered, which it does by stopping some and setting others in motion until the action has returned to its proper course.

The unconscious working of the human machine—that is to say, the thoughtless, effortless performance of acts which have become habitual through constant repetition—is of the same nature as reflex action, although, no doubt, a very wide interval separates a simple reflex act, as the sudden withdrawal of a limb on the application of a stimulus, from, for example, the unconscious playing of a piece of music by a pianist who has played it a hundred times before. Both rest upon the principle that currents travel naturally along the paths of least resistance, *i.e.* along those where they have travelled before and worn a way; but some paths, or rather systems of co-ordinated paths, are much more complicated than others. The nature of the process of conversion is exactly the same in each case, and always in the form of major premiss, minor premiss, and conclusion; or, more correctly, it is the biological process, that

particular form of intercellular action which is expressed in words as a syllogism. The syllogism, or rather its physiological correlate, is the form of unconscious as it is of conscious action. The same mechanical laws prevail in both cases.

The subject of unconscious Cerebration has, I need scarcely say, been treated of long ago by Sir William Hamilton, Dr. Carpenter, and others. But these writers never realized the full extent of their doctrine, owing to their having included as "thought" only that which is supposed to take place in the cerebrum, whereas, in fact, the physiological process is eventually nothing more than the conversion of an afferent into an efferent impulse, and no difference can be supposed between the processes of the brain and those of nerve-cells in other parts of the body, whether we choose to include these latter as "thought" or not.

We must keep the distinction between conscious and unconscious active life well before us without drawing fast boundary lines. Most of the habitual acts of our lives, nearly all that concern the interior economy of the body, such as digestion, secretion, circulation of blood, etc., go on unconsciously by pure reflex action; but not all reflex acts are so entirely unconscious as these; breathing, for example, may be fully conscious. But although the organic processes, like digestion, etc., continue unconsciously so long as the machinery is in order and working well, consciousness enters the moment there is any disturbance, as if calling for a rearrangement of the actions, which our knowledge

is rarely able to effect. Besides these lower organic processes by far the greater part of the ordinary business of every man's life is carried on unconsciously, or sub-consciously; *i.e.* the entry and the finish are conscious, but the main course, so long as it continues regularly, is not; in fact, as has often been remarked, a piece of work is not perfectly performed until it goes so entirely of itself that we do not require to think about it. All the routine of eating, dressing, walking, talking, is as purely mechanical as anything can possibly be; we do not think of each act, excepting at most at the moment of commencing. The clerk at his figures, the dressmaker sewing, the railway guard with his trains,' the gardener digging, the carpenter sawing and planing, are all thinking of something else whilst they work, although each of their actions needs co-ordination and the nicest adjustment of many different forces; the machine does them alone. They have been done consciously many times during the prentice years, and now go of themselves. I do not mean that the agent is not aware of what he is doing, but his acts are not directed or controlled by a conscious will, they go on of their own accord, until a stoppage occurs, and then full consciousness, always on the alert, instantly enters. And for every new account that is made out, every dress that has to be fitted, at all critical moments of the work, the will becomes again conscious, "the attention is entirely absorbed."

Every life demands some higher intellectual

work than that of mere routine. Many of those who are compelled to rely upon their own wits for a livelihood are apt to think that a "settled position," some quiet berth in a flourishing office, where business goes quite mechanically, or else the possession of an independent fortune, would give rest to their minds and relieve them of the necessity for original thinking. How fallacious this notion is those know who have tried it. New work has to be learned, not even the most mechanical of workers can live for long without devising new ways, needing conscious mental effort which, though the same in kind and in form, and equally in sequence of cause and effect with the unconscious routine, works upon new material. Competition is everywhere around, threatening to crush the feeble; the world is advancing, and those who cannot keep pace with it perish. Were it possible to maintain life in such a manner that waste and repair should exactly balance each other, we might continue our routine life in comfort without a thought for more; but it is not possible. The creative force always outweighs the destructive; the net outcome is growth in the individual, in the species evolution, and it is with man as with the forest tree which, failing to keep pace with its fellows, becomes oppressed and withers. The thing which decides which tree shall wither, which man shall fail in life, is its innate vitality—its indwelling will, its inspiration that comes we know not whence. All the new material is drawn from the inspiration of nature;

from the eternal will of all created things. It is this that I would call Genius; although the word is often reserved for the more brilliant and showy efforts of higher art, yet dispassionate reflection cannot fail to convince us that the humblest thought or act, if it be original, is as truly inspired as that of a Newton or a Goethe. In this lies the individuality of each worker, that which stamps his work as his own. The unconscious routine, although in extent by far the largest part of every life, is the least in ethical value; it is not vital, and cannot continue to live alone. Here all minds are alike, producing the same action in response to the same impressions, while in the higher conscious life each works according to the light which he has received, striving to make *that* his own, that through him it may illumine new fields for thought and action.

And so we live in constant intercourse with nature. We have already learned to look upon every new and useful action, every fruitful discovery, however trifling, as a revelation of an order of things lying beyond our own, and it is with this that consciousness is continually engaged when it is able to turn away from the self-moving mechanical action. I must here again repeat the warning that the two kinds of mental attitude are not so definitely marked off as I have been obliged to represent them. There are no hard lines in nature; even between regions that are very clearly distinguishable in their general features there is no definite line of partition. We are not

generally accustomed to look upon our humbler acts, those which do not entail conspicuous and far-reaching consequences, as having a transcendent origin. To return to our example, to speak of seeking the way in a strange country having anything in it which by any straining of terms could be called inspiration will be unintelligible to those who cannot conceive of inspiration otherwise than as a sort of Pythian madness. This is not what I mean. I draw my illustrations from familiar actions in order to show that the divine voice is often nearer to us than we suppose. It is true that if the road is easy to find an experienced person will follow the directions given to him quite mechanically. But if it be a little difficult there is always a large personal element which is quite as important as the directions. There are some who always miss the road however carefully they follow the directions; even when they have a map, and have been that way before, they will still fall into mistakes; just as there are people who always commit breaches of tact in society, while others never go astray. Call this personal factor what you please, call it aptitude, or sense of locality, or sympathetic understanding of country paths; it is metaphysical; it lies out of the chain of causality, and will not be affected by any change in the direction given; it is, in a modest sense, an inspiration. And in whatever we do this personal factor of enthusiastic sympathy with the work we are engaged in is always the decisive factor. It is never entirely absent, not even in

the deadest routine; it may be suppressed for the time, but it enters and gains strength as our work becomes original; and in the rare and precious moments when a great Idea dawns upon the mind, it is consciously recognized as a light from another world.

We saw in a previous study that the perception of an object is the impulse which sets the motor mechanism in motion. We have now to add that if the action is to be original, to be something more than everybody knows and does, some measure of inspiration must be joined to the bare perception. The source of the inspiring Idea is metaphysical; but the moment that it enters the mind it must clothe itself in physical form. It will appear as some new method of working, a new invention, a witty saying, a great poem. In order that it may become common property and be communicated amongst mankind, it must be clothed in words. In all this it suffers degradation; the sentence which I communicate to another does not adequately express the light which was revealed to me. And since it is to be used by men it will be liable to criticism, which is a negative process of testing the truth of a revelation. By negative I mean that it originates nothing itself, but may bring to light a contradiction between the revelation and the positive scheme of nature, if one exists.

I have in the sixth chapter of my *Essay on Culture* spoken more fully of the perceptions which supply the data for the higher original action of

human life, those which relate to things not seen by all, but apparent to the finer vision and more intent contemplation of genius, and have there called the faculty which receives them Imagination. I laid special stress upon the fact that imaginative perception is strictly objective, its objects as physically real as those beheld by common eyes. The universal tendency of commonplace natures to throw discredit upon the intuitions of imagination is born of the desire not to allow themselves to be outstripped in cognition; but of this very antagonism of inferior, *i.e.* more mechanical, less imaginative or inspired minds, springs the most precious confirmation of the reality of an inspiration; and here the supreme importance of the reason, in its criticizing, purifying capacity, becomes evident. The sole test of the reality of a new discovery lies in its relevance, its utility for life; in the possibility of bringing it within the general causal scheme, of setting it in action, so that it shall, in one way or another, add to the happiness or welfare of mankind. Not even the greatest can declare what he has received to be true sterling metal, can know it from a false delusion, a dream, a fancy, until it has been brought to the test of universal human cognition, and the greatest and most earnest workers are just those who are most desirous of accepting the test. Neither a Newton nor a Goethe can be himself without a public to criticize, approve, and accept his message. It is sometimes said that revelation cannot be criticized. Such language is fit for

impostors and hypocrites only, those who require blind faith and destruction of the human mind for their credentials, who fear to have their passports viséed. For they suppose a God not only apart from the world, but out of sympathy therewith; a God who has created men and given them reason only that they may rebel against him. Criticism of all revelation is a sacred duty—criticism, not scepticism, for the intellect, rightly employed, is far from being destructive to faith. How without criticism shall we tell the true voice of God from that of the false prophets abounding everywhere at all ages?

I know that this insistence upon criticism will offend many zealous hero-worshippers, and I myself should be the very last person in the world to say that the divine genius does not know what is true in the sphere of his own activity a thousand times better than the senseless public. But his knowledge has been gained from mankind, from sympathy with its deepest needs, and even the captious self-seeking incompetence of the press-scribbler will be welcome if amidst the rubbish he can find one living spark of truth, one scathing flame that will help to burn away the remnant of dross still clinging to his treasure. For humanity itself is Nature, and is nothing else than that further world from which his revelation came. Contempt of the public is not the mark of the highest, but of second and third rate minds; of those who love themselves rather than the message entrusted to their care. And as the inspiration of the artist, no less than

that of the humbler worker, is derived from mankind, so to mankind is his last appeal—not to the frivolous fleeting thoughts of the hack scribbler who writes because he is paid to write *something*; not to the formulas and party watch-words of sects, but to the lucid truth of the purely human, to the Idea of humanity which changes not but endures for ever, belongs to no country or age, and may be read through all history from the hoary inscriptions of Egypt and the sublime lispings of the Vedas down to the dramas and writings of the greatest and truest of all inspired workers that have lived—Richard Wagner.

This higher perception, for which we will retain the word Imagination, is unspeakable. The proper seat of language is the lower, mechanical, and in the main unconscious thought. Language consists of words; and before it can be a means of expression between one individual and another it must become current; the words must be generally understood by all to whom they are addressed, and the things and relations which they represent must be common property. When a new perception is gained it may indeed be ticketed with a name, but this is not yet language; before it can be used as an instrument for communicating the impression of the thing or relation to other people, they must know what it means; the perception must be habitual and familiar; it must have entered more or less into the range of the lower routine life. No truth in the world is more certain or more fully acknowledged than that the higher

thoughts of human Imagination cannot be adequately expressed by words in their literal technical senses. Technical language, with its rigid definitions, parting off the phenomena of nature into exactly defined compartments, is serviceable during the stage of enquiry and learning, and in all practical affairs, but it is destructive of higher thought, and fails the moment that we pass beyond routine; it cannot express the subtle perceptions and phases which form the most essential thing in every scientific enquiry, because they are just what is new in the enquiry, just that part of it which has not been appropriated by mankind at large, and yet remains to be conquered. Original thought is speechless; once its proper words are found, the originality is gone; its inspiration, its conscious life in an individual human mind is lost, and it begins to take its place in the dead mechanical routine of which the bulk of our lives consists. Positive language, except it be for instruction, expresses not our thoughts but our sophisms.

We may now say why men often refuse to abandon their views when refuted by valid logic; for we have now gained an insight into the real nature and value of all book philosophy, doctrines, and scientific formulas. They may be true; they may be useful for many purposes; but they never can be living, never adequate expressions of that which they are intended to express; and, as is amply proved by the experience of every one who has read much, often confuse the real expression quite as much as they render it intelligible. The words

may be refuted, because they are not the thought itself; nor can it be learned from the words alone. You must think out the thought, live it yourself before you can really grasp it. Dialectic is bound to words, and suffers accordingly from the trammels which they impose. May not thoughts of this kind have been in the mind of that artful deceiver Socrates when he refused to write, when all his talk was banter, but his life in its artistic *action* told a nobler truth than that of any philosophy?

Language within the region of the lower routine life is of course in no way checked, but rather intensified and exalted by the new inspirations flowing in. Each individual machine or agent is part of a community, his action is effective only when strictly subordinated to that of the larger unit. Some vehicle of communication is needed between the lower units, the individuals amongst themselves, for the sake of their common action. Here is the proper sphere of positive assertion; here, in the direct communication of perceptions by means of words, language can live and thrive, without being necessarily degraded into sophistry. It here forms an integral part of the great causal machine, a link in its course essential to the efficient action of human corporate life. Its special function is to unite the numerous centres of action, the subordinate mechanisms together, that they may work with united effort as one body. With animals this bond is wanting; their simpler needs do not require combined action in the same degree.

Yet gregarious animals contrive to act in perfect unity with each other. Most instructive and interesting lessons are to be gained by watching their habits and observing how the end is achieved without any medium of language. A dog can convey his emotions more vividly than a man; because he commits no sophistries, tells no lies. Watch a flock of geese waddling down a country lane, mark how every change in movement is performed simultaneously by each. There is not one that starts it for the others to follow; no disputes for precedence or leadership arise; none are needed, for all move together in one body, doing without effort and perfectly what the human being with the aid of language takes long and laborious drill to acquire. Still more beautiful and impressive are the movements of wild birds in their flight. If an enemy appear within sight, in an instant the entire flight, careering at a hundred feet a second, will swerve and change its course with such accurate co-ordination of the movements that its figure is not even disturbed, but remains just as it was before. I have never been able to view this beautiful sight without a thrill of delight at the superiority of nature's methods over those of man, or without the Unity of Will coming vividly before me as it could never be brought by words.

The proper value of language is therefore very clearly laid down. Within the sphere of routine positive language has a distinct function assigned to it, but towards the higher life of inspiration it can only be critical, *i.e.* negative; or else sophistical.

It does not always follow that sophistical language is necessarily false; but it is insecure, and we must meet it with reserve and mistrust, remembering that from the very nature of things the words cannot bear their literal meanings, but must be construed figuratively until our interpretation can be tested by such facts as are attainable. Then indeed they may even be useful for higher thought, but the course of philosophy has always in Europe been the precise opposite of this. In philosophic controversy rigid adherence to the literal meanings of words is the first rule insisted upon. The thought in consequence comes to be ruled by the words, and has to be trimmed and robbed of its purity to be brought into the region covered by its verbal subject and predicate; until, in accordance with a well-known mental principle, men will at last believe that which they constantly assert, and the thought in its corrupt distorted form comes to be believed. Thus is occasioned a strange contradiction to the observed facts of nature; for men do not act upon their speculative doctrines. If we are to accept the stated doctrines of men as their real beliefs, then we must perforce acknowledge that the human mind does not control human action, but that there is here a breach in the scheme of causality, the mind existing by itself and for itself alone. Were this so nothing more would be needed to bring philosophy into discredit and to justify license in every form. But it is not so; the reason why speculative thought seems to have no influence upon our actions is that

what we call our thoughts are not what we really think; they are debased by language.

I wish to be understood rightly. The real doctrine existing in the mind, the universal concept or Idea gathered from the totality of experience, the inspiration drawn from the metaphysical world —for both mean the same thing—does very powerfully rule the action of our lives; but the verbal expression is a secondary product, a very imperfect representation thereof, and always misleading. Logic exalts this secondary verbal expression to the position of sovereign ruler of thought, by studying and emphasizing the words, instead of using the verbal form as a step, first as a critical canon, then as a support to help the mind to understanding by sympathy, the only channel by which an Idea can be fully understood or communicated. The impulse, the objective impression of a relation in the outer world, enters the mind to be, as it were, passed in review before the entire life-experience of the individual subject, plunged into Infinity, to emerge again as an action. Of what it undergoes in the mind the individual subject may be partly conscious, if he attend very closely, and have natural aptitude for introspection, sharpened by practice and training; but he cannot express it, because the mind is not a machine adapted to such expression; its proper function is not speculation, but action. The investigation of the proper and improper employment of language will form the subject of the two following studies.

# X

## DEFINITION AND THE CRITERION OF TRUTH

For thousands of years philosophy has continued the search for a criterion of truth without finding. The concept of truth is inseparable from that of language; it is the truth of a verbal subject and predicate. Yet how little language cares for abstract truth may be judged from its only providing one copula for accidental, passing relations, and for those which are essential and enduring: "a bird *is* flying past," "water *is* a liquid;" where the copula bears quite a different meaning in each case.

We have made verbal logic our master; to speak or act "illogically" is a reproach, and acts are constantly condemned as "illogical." In the strictest sense, no act can ever be illogical, because the primary cannot be judged by what is secondary; none may be tried but by his peers. Moreover, the supreme authority of logic is contradicted by experience; for wherever the natural human impulses are kept in subjection to strict intellectual reasoning, the character is felt to be lifeless, the

actions meaningless; the warm breath of living humanity is wanting. Such a man wins neither our love nor our respect, but is rightly mistrusted as a sophist. Every theory of logic that I have studied treats the desires of men, human nature itself, as an influence *disturbing* to the intellectual process, as something which contaminates the logical purity. Let us go to the fountain-head of modern thought. Kant observes that no force can deviate from the essential laws of its own nature; yet he is forced to acknowledge that the inferences of the mind are not always in accordance with the truth; whence it follows that if the mind is a mechanism for discovering truth, it does not act according to its own essential laws. To meet this, after the usual manner of philosophy, he introduces a new technicality, Sensibility, something which possesses the power of moving the mind to substitute Delusion for Truth.[1] This does not explain, but greatly enhances the difficulty, for it is upon Sensibility that reason must in the end fall back as its own condition. All becomes clear if we remember that the purpose of the mental process is not truth, but action; logical truth is a mere by-product. The springs of life are not intellectual, but moral; we need a criterion, not of truth, but of action. The cry for truth, as we hear it both from theology and from science, is wholly a move in the game for supremacy. I do not find that men care very much for truth in itself, apart from the word. If I have made a

[1] *Werke*, Hartenstein, viii. p. 54.

powerful enemy by means of malicious slander, I shall not regain his favour by proving that I spoke truth.

I trust that no reader will misinterpret my words into an argument for untruth telling. Would that any words of mine could help, however feebly, to turn men from lies to seek the truth! In the world, as I know it, I cannot find much love for truth itself, but only for the talk about it; and I wish that it may be understood and followed for its own sake. At the same time, I think it would be well if, in the meanwhile, and until we know its meaning, the word "lie" and its derivatives could be prohibited from our language. It is in very common use, but is a very dangerous edge-tool when its meaning is not understood. Nor do I wish to disparage language. True language means right adaptation of the most powerful instrument that we possess, pure material for thought. Even impure material may be useful, if we know it to be impure; but when we try to pass impure material for pure, there is great danger. This is the sophistry perpetually and systematically imposed upon us by the logic of modern science. Let it not be supposed that these matters are of trifling moment. Were nothing more than an academical theory at stake, logic might well be left in the hands of professors. But the government of our thought is the government of our lives, and if the head is unsound, the entire body will suffer. "If a philosopher must needs have his rattles and playthings," says James Beattie,

"let him have them; only, for his own sake and for the sake of his neighbours, I would advise that edge-tools and other dangerous instruments of amusement be kept out of his reach." It is quite time that the public at large should know whither we are driving under the pilotage of our intellectual leaders, what is the real drift of modern philosophy; should realize that the entire foundation of speculative science is falsehood, artfully hidden by a logical method admirably adapted to uphold the rule of words. It has spread through all our modern life, making it false, unnatural, selfish, in a word—sophistical.

With regard to the theory of Logic, which some have sneered at me for daring to impeach, lest it should be supposed that the charges against it are brought only by popular writers and unacademical amateurs, I will quote the words of a high authority, himself a Professor of Logic. Dr. Adamson writes in vol. xiv. p. 783 of the *Encyclopedia Britannica*, with reference to the more extensive recent works on logic, that "while the matters treated show a slight similarity . . . the diversity in mode of treatment is so great that it would be impossible to select by comparison and criticism a certain body of theorems and methods and assign to them the title of logic. . . . In tone, in method, in aim, in fundamental principles, in extent of field, they diverge so widely as to appear, not so many different expositions of the same science, but so many different sciences. In short, looking to the chaotic state of logical text-books at the present

time, one would be inclined to say that there does not exist anywhere a recognized, currently received body of speculations to which the title logic can be unambiguously assigned, and that we must therefore resign the hope of attaining by any empirical consideration of the received doctrine a precise determination of the nature and limits of logical theory." No words of mine could add to the force of this crushing irony upon the science which only exists by virtue of strict definitions.

Matters being thus, it would be hopeless for me to attempt refutation of any particular logical doctrines. I should immediately be met with the answer that not this, but some other doctrine was the true one. All the discussions which fill our text-books I regard as mere dialectical subtleties. For my purpose it is enough that the demand is constantly made that speculative knowledge should be "based upon reason," which implies that reason is competent to serve as a foundation for knowledge.

To begin with, let it clearly be recognized that every process of the mind within itself, and apart from its inter-communication with the outer world, every act of the reason, is syllogistic. To reason is to syllogize. "Whatever cannot be reduced to syllogism," says Whateley, "is not reasoning." Language, in so far as it is scientific and demonstrative, is a tangle of syllogisms, and it is easy, when the rhetorical superfluities have been stripped away, to disengage and lay them out as premisses and conclusion. This is true of all discourse.

Next, it must be observed that the physiological

processes themselves are hidden within the brain; we can only study thought through its shadow, language. From this alone it is evident that every logical theory must be inadequate, since the processes we describe are not the real processes, but only copies.

The starting-point of reason is experience, or observation of some apparent fact in causality. The object of perception, named A, is a concatenation of perceivable attributes and relations: *l*, *m*, *n*, *o*, etc., the term relation being here understood, in the widest possible sense, to include every kind of property cognizable by the perception. The equation $A = l + m + n + o$, etc., when expressed in words, for communication to other minds, is the definition of A, and is simply an assertion that I mean to call that group, whenever it occurs, shortly: "A"; it then becomes a unit, a brick in my logical edifice.

I further notice that the group which I have denoted by A is always (*i.e.* always *has* been, so far as I have observed hitherto) joined with another attribute, *x*. My perception being limited to the present and the past I can only say that *x* and A always *have* been conjoined, not that they always will be in the future; it is quite possible (at least neither reason nor perception can tell me anything positive to the contrary) that some day a case of A will occur alone. With the attributes *l*, *m*, *n*, *o*, etc., it is different; they must always be present because the totality of them is the very definition of A; if any were wanting it would not

be an "A," *i.e.* I should not call it A, but find some other name for it. But *this* is a mere matter of words.

Statements of the form A is *l*, A is *m*, etc., are called analytical, and each may be described as an extract from the definition of A. Arguments from such premisses, however complex, are a mere repetition of the first predication, or of a portion thereof, in new words; they are purely verbal. The other kind of proposition, that which unites the subject with something new, leads to synthetical arguments; they are, as I have said, uncertain as regards the future, but they possess one very important advantage for our thought; having always hitherto seen A in conjunction with *x*, the mind is led, on its reappearance, again to look for *x*, which may thus sometimes be detected, and its presence verified, when otherwise it would have been overlooked. It is not a proof but an indication.

The active business of life consists in shaping the future out of the past, and what has just been described logically is the application of experience to life. Past experience does not show what will happen in the future; but it affords many an indication, many a hint of what may be expected. The logical syllogism: A is always conjoined with *x*; here is a case of A; therefore we may expect *x* is the form of all reasoning, deductive as well as inductive. The degree of probability is very varying; in some cases the indications, especially when several converge together, may

be so strong as to amount to almost practical certainty.

The attributes, *l*, *m*, *n*, etc., which made up the concept may be anything perceivable. We are here only attending to namable things, but it must not be forgotten that many of the attributes perceived are too subtle to receive names. The word "A" is therefore a very imperfect representation of the concept. The mind's faculty of apprehending and fixing such groupings of attributes as they occur is called in the widest sense Imagination; that of storing and recalling them upon after occasions is Memory. The object of my representing the unit $l+m+n$, etc., by a conventional articulate sign, the *word* A, was that it might be communicated to the companions of my social life. For the direct attainment of my own individual ends the word was not required, and animals contrive to fulfil their desires, often far more perfectly than we do, without speech; language is not a component part of thought, but a derivative, secondary product. As an *aid* to the mind the device of labelling each concept is, it is true, of inestimable value, since it provides a resting-place for thought at each stage; but its main use is in enabling the individual mind to unite its labours with those of others; and as two heads are better than one, so must the united efforts of millions be incomparably more powerful than those of a single brain; hence the vast power of the human intellect compared with that of the speechless beast.

In synthetical argument from visible relations

the things spoken of are capable of being produced, and the statements about them tested; with the living object before it the mind cannot well go wrong, since any mistake will at once be rectified. But in analytical argument, rooted as it is in a verbal expression, there is very great danger of error. For groups may be constructed artificially, and a semblance of reality imparted by means of the name. The mind in search of a concept selects from among all the attributes given in its experience such as will fit together, and combines them skilfully into a compact aggregate in such a way as to have all the appearance of a real perception. The group can then be manipulated and syllogized with precisely like a real concept of experience. For direct practical ends it is barren, because the only thing which inspires life into the organism, perceptible reality, is wanting; its place is only in sophistry. Such an *Ens fictum* is a mere counter for calculation, without the substance of true coin. "We create Artefacta," says Professor Forel, "artificial compartments, limits unknown to nature, build in the air edifices, and at last worship them as our scientific idols, to which we crowd, even while they threaten destruction to the tree of knowledge."[1]

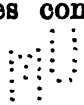
[1] *Gehirn und Seele.* My purpose in quoting, here and generally, is to show that all the premisses which I require are admitted by thoughtful writers. I do not wish to convey that "*artefacta*" are peculiar to scientific men; only they are more important with such, because of the power which science wields. But when in connection with a kindred error a scientific writer informs us that "in the case of persons engaged in scientific pursuits it does *little harm*," I can only reply that such a bold claim to privilege has rarely been excelled even by a theologian.

It is scarcely possible for those who have not given much critical attention to modern science to realize the full extent to which the pernicious habit of reasoning from fictitious concepts flourishes even among the foremost thinkers, and especially among the academic classes within the domain of certain sciences. Such a condition of speculative thought could only have become possible in the complete absence of clear ideas about logic. I shall give instances presently; first we must understand very distinctly what is meant, that there may be no doubt or mistake in the recognition of the evil. Wherever thought or action has withdrawn itself from the recognizable realities of nature there is such a pseudo-concept or *artefactum*. The resulting discourse is like a person keeping accounts for their own sake alone, *i.e.* without any desire to regulate his expenditure, or to judge of his finances from the information which they afford. There exists an unfailing test by which pseudo-concepts may always be detected, in the extreme dulness and barrenness of the argument, felt at once, owing to the absence of living inspiration. How many of our scientific utterances would disappear if readers and hearers always remembered that the moment science becomes dull it is false!

Even a mind so penetrating and lofty as that of Blaise Pascal contemplates the possibility: "*de n'employer aucun terme dont on n'eût auparavant expliqué nettement le sens*;" and "*de n'avancer jamais aucune proposition qu'on ne démontrât par des vérités*

*déjà connues*," i.e. of defining all the terms, and proving all the propositions, without for a moment seeming to suspect that such an attempt would effectually put a stop to all speculative discourse. Perhaps there are some who think that to define each term of our model predication, *l*, *m*, *n*, etc., is a very simple matter, and is generally dispensed with because the definitions are obvious. Let those who think so try it. Every definition is a step from the known towards the unknown; whoever doubts this need only examine a theoretical book upon any subject that he pleases to convince himself that it is, and must be so, directly we pass away from visible things. If our purpose in definition is merely to settle what the thing is that is being spoken about, the best way would be to produce it; then it would be known; with the thing bodily before us every statement about it could be verified. This, which logical writers contemptuously call "pointing with the finger" is not admitted as a mode of definition. Of course not; for logic is a science of words, not of things. It is, nevertheless, the only legitimate kind of definition for *knowledge;* all others are only makeshifts. Words must, in the end, always return upon themselves. What is snow? Water frozen into clusters of small white crystals. What is "white"? The colour of snow. To that we must return in the end, if not in every case at once.

For a definition is a classification narrowed down. Instead of enumerating all the attributes connoted, I may shorten the process by



comprehending many in one class name, and adding the *differentia* or specific attribute of the thing intended. The class itself, and the *differentia* again require definition by being ranged in classes still higher and more embracing, and the process must be continued until we arrive at a *Summum Ens*, which is self-existent, and cannot be further classified. Here, however, we have reached those realms where no words can enter, and must perforce either retrace our steps around an identical proposition, or leave the definition imperfect. This is really what is done, as I will show; the stock example will do very well.

"Man" is defined as *animal bipes*, or *animal rationale*, these being supposed to express him fully, his *Ens*. But they do not; one excludes all men who have lost a limb, the other all who have lost their reason. The second definition is peculiarly interesting because logicians are always assuring us that men seldom reason properly; so the reader may find out, if he can, what is the true definition of *homo sapiens*.

The first definition leaves two terms—"animal" and "foot"—yet to be defined, instead of the initial one. To define either without involving the terms of the other or of "man," will prove extremely difficult. We should have to bring in abstruse facts of natural history and anatomy, which must themselves again be defined, and so on. Either we must return to the point whence we started and define by the *definanda*, or retire farther and farther into the realms of the

unknown. In positive science this difficulty is avoided, because, with the object before us, each step can be verified. But in speculation the concepts have to be artificially constructed. They represent, not any attributes actually found in nature as objective realities, but arbitrary groupings in the mind of the speaker; and this is equally true, whether they be in their nature physical and actual, only hidden from us owing to the limitations of our senses, or ethical and spiritual. Such argument is necessarily analytical and purely verbal; the mind is led by the seductive subtlety of syllogism, to believe that to be true which never can be known. Now, all practical application of logic to actual life is in some degree speculative, because we cannot say whether the data of the past from which we argue are the same as those of the future in which the conclusion for action lies. Hence all acts that rest upon an intellectual foundation are fallible. To gain a secure footing we must find data which do not change; these are moral truths.

In a definition subject and predicate are interchangeable. Let us for shortness write $\Sigma$ for $l + m + n$, etc.; our equation will then become $A = \Sigma$. In mathematics this may be inverted to $\Sigma = A$, and will still hold good, but in logic only when the equation is definition, or naming, *i.e.* when $\Sigma$ is a definite group of attributes, and A is a *word* which, it is said, shall denote that group and nothing else. For then, and only then, do we know that each fully covers the other, and that the

two are really identical. Otherwise, that is when A is understood as denoting an existing *thing*, it is a classification, as, for example, "man is an animal." It may then happen, and very often does, that the group Σ is associated with some other group of such importance that we should never think of calling it A any longer; or some of the defining attributes may be wanting, while yet we call it A. We see that no final definition of any *thing* is possible; all definitions are only temporary makeshifts, and instead of trying to make them rigid and unalterable we should always be ready to give them up when necessary.

In practice another point has to be observed. Just as the *thing* denoted by A was found to possess many other qualities than those which were at first apparent, so will the *word* A, in the organism of language, have many other connotations besides the attributes of the object. From the very commencement the word has been chosen so as to further the end in view, and many foreign ideas may then be foisted in. Theory, as laid down in logical text-books, requires that any term which is ambiguous must be defined, assuming it to be a very simple process. Is it ever done? *Could* it ever be done when every term is always ambiguous, and it is impossible that disputants holding divergent views should ever agree about any definition? When there is dispute the definition is never expressed; it is tacit, and the word is so selected that the argument may proceed analytically from the assumed connotation. Men speak of

"freedom" or "license," of "firmness of purpose" or "obstinacy," of "inspiration" or of "prejudice," of "scholarly learning" or of "pedantry," of "nature" or "miracle," "faith" or "superstition," according to the purpose in view, whether they wish to praise or blame. The best examples of this form of sophistry are to be found in the particular direction of thought which happens to be in vogue at any epoch. The attacks of modern Rationalism upon the doctrines of the various Christian churches and sects seldom if ever touch the doctrines in their purest form, as laid down by their great founders, but only the more debased form as they exist in the minds of later disciples and epigoni. The doctrine, *i.e.* the definition, is chosen to suit the argument. Of words which are constantly on the lips of scientific rationalists, although their connotation is very variable, I will only mention "Law," "Belief," "Reason"; others, such as "Freedom," are negative and relative (freedom *from* something), but are regularly treated as positive and absolute; while words altogether incapable of definition are: "Prejudice," "Superstition," "Miracle," "Consciousness," "Matter." For example, scientific rationalism insists upon our not believing in miracles; but if, as an ardent lover of science, I ask what this thing is which I am forbidden to believe in, it cannot answer.

In the purely speculative search for abstract truth there is no ostensible action in view; yet without an action in view the thought cannot by

any possibility proceed. How is this to be reconciled? Only by recognizing that the end sought after is concealed. The argument tends, or seems to tend, towards the establishment of a truth; whenever I am in possession of a truth, or can indicate the way to its discovery, or seem to do so, I hold *pro tanto* an authority over the person whom I am addressing, and the gaining of authority over the minds of others is the true purpose of the sophistical discussion. Its results are not truths, but mere verbal predications; words within words, all resting upon definitions which again themselves are words. Accordingly we find the vast mass of modern philosophical writing marked by two qualities. In addition to its unspeakable dullness it bristles with technicalities, difficult because they represent nothing, and most effective when they are most difficult, because they induce a tendency in the *naïve* student to feel very keenly his own inferiority; secondly, we find the necessity of rigid definitions strictly insisted upon in theory, but neglected in practice, that the words may do duty only within hard-and-fast boundaries. I do not, of course, mean that this purpose of enslaving other minds is conscious and deliberate. Our real motives are not always those which we avow to ourselves.

In real science no definitions at all are required, except in so far as is needed to make it clear what the thing is that is being spoken about. Darwin does not begin his great work by defining a species. On the contrary, he shows rather convincingly in the *Descent of Man* (ch. vii.) that it cannot be

defined. I do not remember a single writer of the first rank who observes Pascal's rule. Mathematicians, of course, I except, and also Spinoza, who affects a mathematical form of demonstration.

I am perfectly well aware that the absence of a substantial basis for demonstrative logic has been felt and acknowledged by many. It would be easy to bring texts to show that I have advanced nothing in my criticisms which logicians have not themselves asserted many times. But there the matter is left, and the false method of arguing from empty definitions continues as before. When Kant tells us that logic is not an Organon for the extension of knowledge, that its business is only to judge and criticize,[1] he is saying in short and clear words what I have said more at length; but he, and with him the entire philosophical world, have failed to notice how this cuts away the root from all speculative philosophy, in which the logical reason is avowedly put forward, not only as an organon, an instrument, but even as a *basis* of knowledge. Instead of fairly recognizing a truth of vital moment, philosophers have hidden it under technicalities and verbal definitions; I need only instance the strained and unnatural meanings affixed to the words *Verstand* and *Vernunft* by Kant himself. As to the danger inherent in the use of words, Mill has given an amusing example in his well-known demonstration from true premisses by "an unexceptional syllogism" that "some serpents breathe fire." I need not here

[1] *Werke*, Ed. Hartenstein, viii. p. 13.

criticize his explanation, which, however far-fetched and unconvincing, shows a right appreciation of the truth, because no modern logician is likely to deny that the initial data of every sorites must be drawn from observed and existing facts. My complaint is that this vital rule is not insisted upon or followed; that empty definitions are still put forward, and syllogisms drawn from them "into the blue;" that in the chase for *truth* the equally important objects of *relevancy* and logical *perspective* are ignored; that amid lengthy discussions of subtle distinctions devoid of all practical import the foundations that support the whole are overlooked, and left insecure. Above all, that the distinction has been neglected between positive and negative; that the negative and critical attitude which logic has maintained during the past two hundred years, and endeavoured to pass for positive philosophy, has obscured the only real source of positive knowledge—Inspiration. It would be useless to multiply examples of the contradictions and illogicalities of logical theory, which may be gathered in multitudes from any modern text-book. They are of course not all of the same kind, but take different forms according to the standpoint; the method of overcoming and explaining them away by obscuring the real issue under a blinding discharge of technicalities is common to all. They may all be traced to the estrangement of philosophy from daily life; the philosopher will not verify his results by human nature itself, but treats the vulgar herd as

something contemptible, and unworthy of his cognizance. The result is ruin of philosophy and of mankind; it is only too patent. The human mind must have positive nourishment. Inspiration cannot be destroyed, but it may be degraded. The negative formulas of Rationalism do not touch the hearts of men, and since the competent and learned have neglected their trust, and, following their own individual ends, refuse the food which it is their duty to provide, their place has been taken by others. Lured by the pernicious doctrine of freedom, men have turned to feeble, hysterical dreamers and impostors. We do not find—in London, for example—the public flocking to the various Rationalist, Ethical, and other societies which profess to take up their footing upon science. But the congregations of Theosophists, Christian Scientists, and the rest of the occultist host, are crowded.

To the instinctive feeling of logicians of the need for some stable basis, some starting-point for the syllogistic chain, we owe all such metaphysical notions as those of *Ens*, *Substance*, and the like. The notion of logical deductions from rigid definitions originated with one writer—Euclid.[1] The infallible methods of pure geometry set men in search of similar infallible methods for all logic. No wonder the search was keen, for he who discovered a secret applicable to the things of human

[1] I have not forgotten that Euclid wrote after the theory of logic had been fixed, but am only using his name as the familiar representative of a certain school.

life as the theorem of the three squares is to problems of geometry would, so long as he held it, be almighty; it would be an Alberich's ring, conferring power over all created things. The mistake was gross; for even before Kant had written his *Transcendentale Aesthetik*, it might have been noticed that geometry held quite a different ground to the objective sciences, since its results always proved trustworthy. Now we know that space is only a form of the perceiving mind, constituting a kosmos of its own, independent of objectivity; but still writers continue to support their logical theories by illustrations drawn from geometry, believing, in spite of all evidence, that the same infallibility is possible.

The investigation of the pure *Ens* in itself, we are told, is the subject of Ontology. This is impossible. How are we to *investigate*, *i.e.* determine in words, something which cannot be defined, being itself the starting-point of all definition? We have coined a word; but we can attach no positive predicate to "*Ens* in itself" as a subject, and without a predicate there is no language. It is quite in the way of Western philosophy to mistake the creation of a word for the discovery of a reality. I say purposely *Western*, because Eastern philosophy is in marked contrast, and when the Hindu wished to find a word for the same thing, Being in itself, he, with the boldness and unerring certainty of step which mark the master, chose the familiar personal pronoun "Self," and said, "Being is Self," whence a complete and living

world of philosophy sprang at once into existence. Literary writers afterwards commented upon the thought, but not even the great Saṅkarâćârya himself ever went, or professed to go, beyond the simple revelation: *tat-tvam-asi*, the world is Thyself. With us a contrary course is followed; philosophy assumes as its first duty the task of destroying all the thought of our intellectual forefathers, the early Christian Church and the Jews, because it does not fit into our vocabulary.

The *summa premissa*, the all-governing laws of logic which were to take the place of Euclid's axioms, were believed to have been found in the so-called Laws of Thought, those of Identity, Contradiction, and Excluded Middle. Not to be wearisome, I will only consider the most fundamental one of the three, that of Contradiction: *Nothing can both be and not be at once*; or otherwise, *Contradictories cannot be predicated of the same subject at the same moment.* It is said, on very high authority, to have been denied by Herakleitos. I must, with all reverence, express my doubt that Herakleitos ever denied it; I cannot believe that he, living before logic was invented, would have thought it worth his while to do so. What peculiar meaning the law may have with regard to non-existent things I do not know; we will here only consider those really given in our knowledge.

A naturalist once said to Dr. Carpenter, with regard to classification: "It is very easy to deal with the white and the black; the difficulty is with the grey." Supplement this with the fact,

well known to all artists, that nothing is either real white or real black, but some *colour*, *i.e.* something intermediate, the greater number of things lying near the middle region, and the difficulty of classification and reasoning will become evident.

Black and white are undeniable contradictories (black = not-white; white = not-black); two suppositions are possible. Either:—

1. Black and white are both positive. Grey will then be a mixture of the two positives, with more of one or of the other, according to the shade. Every grey surface, and therefore by implication every surface, presents a breach of the law of Contradiction; it is both white and black. Or else:—

2. White is a positive impression, black its negative, namely, the absence of white. This is the view of most modern opticians, white meaning the reflection of all the rays of the spectrum, black the reflection of none, while all colours, together with grey, are intermediate, reflecting some only. Everything is white, only nothing perfectly. The law of Contradiction falls to the ground, since there *is* only one thing, white, and its contradictory is—nothing. White both *is*—for some white there is; and also *is not*, for a part is not the whole.

The meagre fragments of Herakleitos which have come down to us give no information as to the exact sense in which he denied the principle of Contradiction. May we not reasonably suppose him to have said something of this kind: Everything moves and acts; nothing is stable. Beware

of absolute assertions, and remember that all mundane things are imperfect, all compounds of opposites. Whatever predicate you affirm of any subject, its contrary is also true. The river which flows past as you cross is a type of all things. It is there; but even while you speak it is not there. The first step in philosophy is therefore to overcome the natural propensity of the mind to confine fleeting things in rigid classifications and definite assertions, to suppose that every categorical judgment is a statement of pure logical truth. The desire for a fixed criterion is sophistic. If this is what Herakleitos intended to convey he uttered a philosophical truth of the deepest import; but it was spoken thousands of years before its due time, for philosophy has since done little else than try to make it unsaid.

I have just called the desire for a criterion of verbal truth sophistic; it is so, because whoever asserts that there is a criterion necessarily adds by implication that it is in his possession; *i.e.* that he is himself the judge. This is no logical subtlety, but an observation of common experience; it is true of every one of the party formulas by which the lives of men are now so largely governed; each is only a partial truth for the realization of which many other equally valid truths must be sacrificed, and adopted merely to favour the authority of some individual or party. Take, for example, the formula Induction, which science has for the present made its own. Herbert Spencer, on the one hand, sneers at Goethe's undoubted discoveries

in morphology, not because they were wrong, or unimportant, but because they were not arrived at by the path which his school has laid down as the only right one. I will quote his words (*Biology*, ii. p. 180): "Whatever greater elaboration (*sc.* than Wolff) Goethe gave to the theory considered as an induction, seems to me more than counterbalanced by the irrationality of his deductive interpretation; which unites mediæval physiology with Platonic philosophy." In other words, the fulness and clearness of an important discovery are of less importance than that it should be arrived at by the fashionable route; the merit of the discovery is more than outweighed by the iniquity of supposing Plato's philosophy to have any meaning. On the other hand, we have an equally high scientific authority, Sir David Brewster, when speaking generally of the process of discovery in great minds, declaring that: "Whatever this process may be in its details . . . in its generalities at least it is the very reverse of the method of induction" (*Life of Newton*, ii. 405). Here are two contradictories, sufficiently categorical, and the law says I must choose which I will have and renounce the other. I cannot do so. I believe neither of them to be the truth, but each to be an assertion of personal *opinion*—a half-truth. Truth, in the sense of the law of Contradiction, I believe to be incapable of expression in words, because language is not designed for that purpose. I hold the law of Contradiction to be the most fundamental of all untruths; its supposed truth only holds with regard

to non-existent pseudo-concepts, and it becomes more and more untrue in proportion to the reality of the things contemplated. Each of the statements quoted above is sophistic,[1] because absolute and rigid. How entirely the sophistry lies in the words, in that which appears before the public, not in the secret thought, is proved by the certain fact that if these three men—Spencer, Brewster, and Goethe—could be set down together to work at any scientific problem, they would find themselves working in exactly the same way, eagerly discussing it on common ground with each other, and borrowing each other's apparatus.

It must be well understood that my remarks are only intended to apply to the living and breathing world of which we are ourselves a part. If there exists a world of abstract thought in which the law of contradiction has an intelligible meaning, I can only say that it is a world which I do not understand, and into which for my present purposes I have no wish to penetrate. Whatever this world of pure Mind may be, it is not expressible in the terms of this our own world, it does not contemplate colours or any other attributes,

[1] I trust I shall be forgiven for the seeming discourtesy of this word, which I cannot well avoid. I mean none; least of all towards the great biologist from whose descriptions of nature I have so often received delight and instruction, however little I may sympathize with his philosophy. It is necessary to understand that we are *all* sophists, scientific men no less than others. I do not, of course, mean that any of us, except the few utterly forsaken and contemptible, deliberately sit down and concoct lies. My seventh study was written to show that the ordinary business of life is not done deliberately, but automatically, and that the moral will is an—often unconscious—onlooker. No Determinist has a right to be displeased with me for that.

and those who wish to explore it must not use our names and words which have been contrived for our own lives. We dwell in different realms and speak a different language. With us absence of contradiction is no criterion of truth, nor is contradiction a mark of anything more than imperfect verbal expression—careless literary workmanship, perhaps, but not necessarily confusion of thought. Notoriously the finest and deepest minds frequently seem to contradict themselves, particularly when we do not fully understand them; but the thought is not thereby refuted. It is the insistence in theory of rigid verbal definition that makes the feebler minds so excessively timid about contradicting themselves, and furnishes the unintelligent reader or critic with a weapon with which, logically, the profoundest thought may be overthrown.

It may seem a paradoxical assertion that without a knowledge of real Being language itself cannot be understood. Yet it is easy to show. We do not fully know the meaning of any of the general terms which are the very life's breath of language. Of a hundred who say that they like music scarcely two will be found who mean quite the same thing; one likes, not the music itself, but the rhythm, or perhaps the harmony or melody; another only recognizes a certain class of music, perhaps modern European, and forgets that there is any other; with a third it is not music at all, but excitement and novelty, or perhaps the graceful ways of some pianiste, that draws him to the concert room. No one can say what it is that he likes, or be secure

from misunderstanding, until he has settled with himself what music *is*, *i.e.* what is its inmost being. There is a question which I suppose every one must put to himself and answer in one way or another, for every one talks about it. What is meant by Honesty? A very little thought will show it to be a purely artificial convention of society, and nothing more. Are we to be satisfied with this, or is it only a jest? No answer can be given until we know what honesty is. I have never yet met any one who could give me a satisfying definition of what is (perhaps ironically) called "common" honesty. Yet I think I know—vaguely and dimly, not indeed fully, but sufficiently for my own purposes—what it is. I cannot put it into a definition; none the less I have a criterion that never fails to pronounce sentence, in every case that arises to tell me whether I have acted honestly or not, and moreover I feel its verdict to be so sure that I must hold it *true* when all legal enactments, when public opinion and every ethical code that has been devised declare the contrary. For the criterion lies not in words; it rests in the human heart, which no sophistry can tear from the eternal source of its being. But when I try to impose my conviction upon another I must resort to language, and its truth is gone. We need it not in words; we need no yard-rule to measure the Infinite.

The real import of definition, and its profound significance for our human life, seem to me to have never been so clearly apprehended as by

Socrates. His conviction of the necessity of having sun-clear notions of the things we speak about was, however, very different from Pascal's; his purpose was not to prove propositions from them. Too clearly did he recognize where the ulcer lay. "You men," he seems to say, "you Athenians to whom first among the nations has been entrusted the power of a language so perfect and exquisite as your Attic Greek; how have you used the heritage of Homer? You chatter and prattle about virtue and honesty and patriotism and what not, but you know nothing of what you are talking about. I cannot speak nor write, but I will show in my life and in my death what these things are. What you say is all talk, idle sophistry, no more; and you have your reward in your fees." Suppose Socrates, like Adam in Madách's grandly conceived tragedy, to have suddenly appeared in modern dress amidst the French Revolution, and have asked chance people what they believed their Rousseau-catch-words, *Liberté*, *Égalité*, *Fraternité*, to mean; and suppose some revolutionist more sober-minded than the rest to have pondered over the question. At least he would then have known for what he was fighting.

# XI

## SOPHISTRIES OF SCIENCE

The criticisms upon which I have ventured of the tendencies of modern physical science are not new; they have often been heard before, but as a rule they have been brought hastily, indiscriminately, and without examination of the logical foundations; so that they have remained mere personal expressions of opinion. Moreover, the tactical error has been committed of bringing definite specific charges against particular men. Such a course would be correct, nay, would be the only straightforward one, if the question were personal; but to bring individual instances to prove general charges is wrong procedure; two or three particular cases prove nothing, and can always be refuted singly, since every prevalent error when reduced to its simplest terms and exposed naked, appears so glaring that the individual may deny having held it in that particular form. I wish, therefore, to make it quite clear that I have nothing at all to urge against Huxley, or Spencer, or Pasteur, or Hæckel, or any other eminent man of science. The only feelings which I have

towards those men are of admiration and reverence. My efforts are directed against something incomparably more important than the individual views of any man, however great, against Negativism in its modern scientific forms of Agnosticism, Determinism, and their pernicious offspring, Sophism; against the endeavour of science to coerce the minds of men; against the bitter warfare which it wages upon Faith. All mankind is infected with the corruption; it is not confined to England or Germany, or even to Europe; it touches the whole world, around which the arms of Europe, with England in the forefront, are gradually closing; and the reason why I have directed my charges more particularly against science is not that I hold scientific men to be any different to others, but that they now hold sway, and are responsible. I select the foremost men because they are the most representative.

Perhaps there are some who think that sophistry is only practised by theologians. Science now assumes the control of civilization, as once did theology, and its career will be the same. Will any one deny that rationalist science commits the sophistry of seeking to prove and disprove by words alone things for which no data exist, that it assumes artificial concepts of things unknown, or that logical theory in upholding the supremacy of reason abets it therein? A glance at any academical journal will show what our universities understand by knowledge. Questions are discussed which never can be answered, views expanded

which never can be tested, because they deal with things long passed away and unverifiable; "authority" means the opinion of the one who has read most of the opinions of others, and this is called erudition. Nor is it harmless because it is barren. It is not a harmless matter that our best youth should be specially trained to neglect the profound distinction between opinion and science; to suppose that when the certainty of direct intuition cannot be obtained the prevalent *opinion* will do equally well. Surely Plato wrote in vain for modern scholars; were his divine teaching studied we should cease our controversies over the exact nature of Ideas, and learn what we can understand; the first academical lesson would be to distinguish between ἐπιστήμη and δόξα, between knowledge and guessing. In modern scientific discussion they are regularly treated as of equal value.

For example, let us take the scientific notion of Consciousness, bearing it in mind that no individual knows anything of consciousness excepting in himself, that it is therefore absolutely precluded from objective discussion. The following sentences are gathered from a recent work on Psychology, of very high authority: "Mind exists wherever consciousness exists;" "Wherever there is any kind of feeling there consciousness exists;" "A mind is the unity of manifold successive and simultaneous modes of consciousness in an individual whole," etc. In order to learn the effect of such loose assertions when carried into science,

let us turn to Professor Huxley's chapter on the Mental Phenomena of Animals in his work on Hume. The author here accepts it for an evident truth that the elements of consciousness exist in children and the higher animals (therefore, by implication, in no others). And what are the grounds upon which such a far-reaching hypothesis is rested? Is it an observed fact? or has it been arrived at by a process of trustworthy reasoning? Not at all; the reason given is that "it is highly probable, and cannot be disproved;" no more! Having thus established his hypothesis the distinguished author next proceeds to discuss the conditions of consciousness in the various forms of nature, demarcating its limits with the same exactness as if he were arguing from real data.

The concept of consciousness, thus carefully determined, receives, however, rough treatment at the hands of Rationalism. Consciousness being in a sense the one thing which I can say unconditionally that I *know*—for by "knowledge" I suppose is meant *conscious* knowledge—one might suppose that its evidence would at least be believed. But in the rationalist doctrine of Determinism it is the very first thing to be thrown over. My individual consciousness of a free Will within myself, able to turn the elaborate mechanism of my body this way or that, now to set one portion in motion, now to stop it and start another, is declared to be a delusion which has to be explained away somehow; for no other reason, however, than in that it does not fit with the orthodox theory!

This subjective *Will* of mine, the thing upon which my self-consciousness alone is competent to pronounce—for the outer world can never see *Will*, but only its *actions*—I am told to disbelieve; for the one piece of direct knowledge that I really possess I am to accept the difficult and doubtful inferences of other people from the actions that go on outside! And when we reflect that this theory of absolute Determinism is put forward with the express purpose of destroying belief in the moral sense of men, is intended to deprive mankind of the only light which it has to guide it through the storm-tossed ocean, the only thing which gives value to life, reality to hope, love, sympathy, namely, the sense of right and wrong, which Kant has aptly compared to the starry heavens in the eternity of its beauty, must we not pause to ask ourselves whither we are being hurried?

It is scarcely credible that while thus denying the concept of freedom, denouncing it as a delusion of consciousness, Rationalism, in defiance of its own gods, law of contradiction, logical consistency and common sense, still preaches freedom as a doctrine in every sphere of human existence: freedom of action, freedom of thought and speech, political freedom, heedless how one young genial mind after another drinks of the intoxicating poison, and falls, helpless and broken, to the ground. I am writing no theory, but what I myself have seen again and again with bitterest grief, for it has been my sad lot to see one bright young flower after another sicken and at last

perish from this pernicious doctrine of freedom, held universally in England, America, and Germany. Nor do I write for party ends; when science has set itself in earnest fairly to reconsider its doctrines of Consciousness and Determinism, I shall write no more. A more self-contradictory chaos of opinion than this system of Rationalism it is impossible to conceive; Reason and Logic are nowhere in it. I cannot see that the methods of the Rationalist differ in any way from those of the mediæval theologian whom he denounces. He, too, expects mankind to accept the knowledge which he has laid down for it just as did they. Only, less logically, he claims no inspiration; for Moses, Isaiah, Jesus, and Paul, his prophets are Bacon, Spinoza, and Kant. Each perishes through its neglect of the unity of all things; one sets creeds at strife, the other opinions and parties. True science knows neither dissent nor the bitterness of party warfare.

It will doubtless be urged that there is nothing in modern science to contradict the existence of an unseen world; the evidence for it has often been dwelled upon by scientific writers themselves. Only the two worlds are separate; science merely regards the one as lying beyond her sphere, because to confuse the two would hinder its own special work. "What can be more innocent than Agnosticism?" says the follower of science: "I do not choose to say that I know what I do not know." It is not the modest confession of ignorance that any one wishes to find fault with, but the

aggressive, intolerant attitude which science adopts towards those who go elsewhere than to her for inspiration; who choose other methods than those which she prescribes; her aggressive controversies, made to rest upon words for things which do not exist, such as the word miracle. If to think that what is *wonderful* must be the work of God, be a thing so dreadful that the whole artillery of science must be brought to destroy it, then Heaven help us, for we all think it!

Is it not humiliating to hear the boastful words of a scientific leader of nigh thirty years ago, telling his audience that science means to wrest the whole of cosmological theory from theology, now repeated and applauded by the assembled representatives of science? One might be tempted to ask: What is the particular cosmological theory taught in a theological course at the present day? That question was surely settled centuries ago by Galileo and Kepler. Men sure of their position do not talk in that way. It is sometimes well to remember that our cosmological theory in its first beginning was given to the world at the expense and earnest solicitation of enlightened cardinals, was inscribed to the pope and approved by him, but was rejected, or at least slighted, more than fifty years later by the great apostle of Induction.

We may be ready to grant that scientific Agnosticism does not directly deny, that some agnostic writers have expressly admitted an order of things lying beyond scientific knowledge; still it is not enough to admit in words the bare

existence of a metaphysical world. It must be recognized as the mainspring of our own, the very nourishment by which we live, the source of all pleasure, all knowledge, all profit in our own lives. Science holds the mechanism to be self-supporting; it asserts that we *know* nothing but Causality, whatever may lie beyond; but cannot maintain this position without falling into contradictions. The mechanical world might be deemed self-sufficient if it were stationary; but it advances, it has both a purpose and a source; and when we seek to learn something of its purpose by studying its parts and asking to what end they are contrived, we find it to be in harmony with the eternal Being within ourselves.

The scientific man says: I make it my business to study everything which I find to exist; to observe every activity of nature and bring it within the scheme of causality, so far as my ability and knowledge can reach. There is much that I do not know, but I am quite sure that the causal ties of everything are *capable* of being known. Indeed, the contrary supposition is impossible; the word "super"-natural is a contradiction in terms.

With regard to language he will perhaps say: I find it absolutely necessary, for the clearness of my own thought, to use every scientific term with a fixed meaning. Otherwise I cannot know what I am studying, and when I talk or dispute with any one else we shall not understand each other; we shall find ourselves talking about different

things. Are not all differences and errors due to misunderstanding of terms?

Now there is very much in this which I am ready to admit as perfectly true. The advantage to be gained *during the process of enquiry* by calling the thing to be studied by a definite name and keeping its meaning clearly before the mind, is one that has come home too often and too forcibly in my own experience for me ever to doubt its value, and its importance in *controversy* is a thing upon which I myself would be the first to insist. Nevertheless I must answer: first that it is one thing to use language for purposes of enquiry as an instrument of thought and expression; quite another to suppose that any given thing is fully stated in the connotation of its name, and mould our thought to this alone. Secondly that when there is any doubt or misunderstanding about what is meant definition does not help us a bit, but leads further and further into the unknown. The leading concepts of any science while in the stage of enquiry cannot be defined. In addition to those already mentioned I will only instance "life," "animal," "gravity," "insanity," "income" as undefinable; others, such as "liquid," "duty," "atom," etc., which can only be defined in terms of the completed science itself.

Perhaps this can be made clearer by an illustration. It is a very common observation that fruit tastes better when picked off the tree and eaten at once than it does at the dessert table; that wine has a finer flavour in its own country than

elsewhere; and the same holds good when every precaution has been taken that the fruit and the wine shall not undergo any change in transit. Science will say: you are not using the word "taste" scientifically. Taste, flavour, is a property of the fruit detected by your senses, and so long as the fruit or the wine does not alter, the flavour remains the same, even though your sense organ seems to show a difference. The same conditions must always produce the same effect. The seeming alteration is probably due to your imagination, which is again the effect of other causes independent of the issue before us; in scientific study you must guard carefully against mixing imagination with your sensibility.

This is entirely true. The only thing which I have to say against it is that now, reduced to its simplest terms, it is utterly uninteresting and unprofitable. The only thing which I care about in the fruit or the wine is just that subtle, indescribable quality of the flavour which no laws can explain, no words can denote, which comes and goes with the changing conditions—with my moods, if you will—and refuses to answer to scientific tests. The thing which science tries to eliminate, my own imagination, is the one thing that has interest for me. Were there nothing more in fruit and wine than their bare scientific flavour, we should care for them no longer. I have been told that somewhere in Germany are to be bought artificial Rhinewine powders which dissolved in water will produce any growth of wine required,

indistinguishable from the real product. I have never tried them; but am ready to declare with great positiveness upon *à priori* grounds that they could deceive no one, however close the imitation may be, because just the one thing which makes Rhinewine is wanting. Science, with the aid of logic, does—although with considerably more *finesse*, it is true—just the same thing as these makers of powders. It tries to persuade us that a thing is its measurable chemical and physical composition; that Imagination is a disturbing element in perception.

Remember I fully grant that *as science* it must do so, in order to study objects under their simplest aspects. Nor do I for a moment deny that *as science* it has a most important and useful function to perform in the economy of human life, that of exploring and explaining the mechanism of the kosmos. But science is very apt to forget that the most important factor of all has been excluded from her investigations; that life, inspiration, lie beyond her cognizance. And therefore, however magnificent her results, however beautiful, no deduction can be drawn from them for human happiness or well-being. Locke supposed morality to be capable of demonstration from self-evident propositions by necessary consequences as incontestable as those in mathematics. Stuart Mill seriously contemplated the scientific arrangement of religion for the requirements of the public; but both end in negatives. It is curious that Locke should not have noticed that both his examples

are negative.[1] Every attempt to frame a philosophy of life out of physical science is like the attempt of the chemist to pass his concoction of essential oils for nourishing and inspiring Rhinewine; or like that of the Thibetan Buddhist to make a windmill say his prayers for him; the spirit is the same.

One word has occurred in the course of this discussion to which I must return, the word supernatural. There is one thing which is supernatural, that lies above and beyond physical nature, that cannot be brought within Causality; the denial of it is a begging of the entire question. It is Will. We need not think of Schopenhauer's theory to be convinced that it is so. Science can bring the phenomena upon which the will fastens within its scheme; given the will it can determine the actions; but the will itself it cannot determine or define. Put a glass of Rhinewine before me and science knows what will happen; but whence my love of Rhinewine comes it cannot tell, nor even know that it is there. I alone can know that.

Take the simplest act which can in a modest sense be called artistic, any little thing which you can do better than other people—sharpening a knife, bowling at cricket, or any other accomplishment. Try to describe your particular way of doing it in the terms of science, *i.e.* in words of strictly defined meanings, so as to convey what is essential; you will not be able to. It is notorious

[1] *Essay on Human Understanding*, IV. iii § 18.

that no profession requiring skill can be learned from a book, or from any mere verbal instructions; the skill can only be acquired by *doing* it, under the directions of a teacher in sympathy with his pupil. Equally impossible it is to convey the finer impressions. What equation can tell the curve of a cheek, or the bend of a petal? where in the spectrum shall we seek the crimson or purple of an Indian silk? what is a "family likeness"? The measurement or the formula give you nothing but a degraded approximation. And if you go amongst the higher masters of any craft and ask how they see and work, they will surely answer that it cannot be told; you must have the eye for it, and practise your eye. Every practical man knows how little verbal instructions touch the root in all his own special work. Words are useful only so long as they are not allowed to gain the upper hand. Logic, by insisting upon their application everywhere, has taught men to disbelieve everything which they cannot express until at last they have become our masters. I must again repeat that it is only the rationalist aspect of science, that which seeks its footing in the human reason, instead of in the ineffable world lying beyond its ken, that I refer to in this connection. The highest minds of science are not in this sense rationalist; no more are the highest saints and theologians. I ought rather to say the highest minds in their sober moments, or all minds in their highest moments; for it is not given even to the noblest always to look upwards, while the sun shines

equally upon the just and upon the unjust. The true antagonism is not between one party opinion and another, but between the lofty and the mean. Amongst the great themselves there is only agreement and harmony. There is, so far as my limited reading goes, but one foremost writer of our day who has never sullied himself with a sophism, and he is acknowledged on all hands as the greatest of all, as one who will be remembered when all others are forgotten. Believe or not as you like in the scheme of evolution elaborated by Charles Darwin, no one can closely follow and assimilate his way of thought without being the better.

Before logical theory came into vogue men knew how to express themselves clearly, intelligibly, and correctly; those who know nothing of logic, if they have something to say, do the same at the present day. Life is not sustained from below but from above. Every science and every art which neglects this truth, which affects exclusiveness, which despises common things, and the artless language of common people, will assuredly stiffen into dead, useless formalism. History has proved it again and again, and never more conspicuously than with logic.

The difference between the common man and the logician lies fundamentally in their way of definition. The common man defines as the carpenter uses his chisel, namely, in the way that seems best to him for the particular purpose of the moment, relying upon his own skill to convey

his meaning, instead of upon a settled definition which means nothing. Consequently, if his mind be healthy, his language is more picturesque, more expressive, and more correct than ours. The language of the peasantry is admitted to be more picturesque and expressive than that of the educated classes. The picturesqueness does not concern us now directly; still I do not wish it to be quite put aside as of no account, because I believe æsthetic beauty to be only the final outcome of inner harmony; that is to say, of logical truth. For the present, however, I will only say that the peasants' language is picturesque *because* it is expressive, and expressive *because* it is true. The peasants' tendency is to speak of things as if they were human and living, to apply human epithets to them, and endow them with human qualities. Such language is perhaps called poetical, metaphorical, etc., as opposed to philosophical. My contention is that it is the more literally correct and strictly logical of the two.

A lady who was very fond of gardening once observed to me that she thought the flowers were "human." They had many human affinities, she thought; for example, they seemed to be "frightened when they found themselves in new surroundings," etc. This was entirely in the spirit of the people, and very unscientific; but I think most people will understand what it was that she meant to convey. It was plainly something that will not be found in any book on gardening,

because it could not be fully stated in scientific language without some blunder or contradiction arising. Her language must therefore be admitted to have been *expressive*.

As to correctness, the logical form of her proposition was unexceptionable. She predicated humanity of the flowers because she had observed in them the attributes which to her were the essential characteristics of human beings; just as a chemical analyst will identify a given substance as "chalk," because it shows the properties and reactions of chalk. Only her definition of man was not "animal bipes." Instead of singling out one quite irrelevant attribute, she based her definition upon her knowledge of the entire nature of man, and of his action under given conditions.

Now, I ask any candid person, not having a logical theory to uphold, which is the most strictly *correct* definition of "homo," that which regards the distinctive and universal human characteristics, finding the best verbal expression that it can for them at the moment, caring only that it shall be understood? or that which excludes entire masses of undeniable human beings? Which does most violence to language? Or if we take up our own ground of relevance and fitness to an end, which is likely to make the better gardener, the one who regards his plants and flowers as akin to himself, and loves and understands them accordingly? or the one who syllogizes his gardening out of a book?

And this is the beautiful, living, natural, truthful language which our elementary schools at home and our missionaries abroad are striving with all their power to destroy! This is the popular mythology for which our education offers as its highest goal an Aristotelian discussion upon *Ens!* We call the stories of ancient gods and heroes *lies;* is, then, our crude, feeble English Church doctrine, which we in our unspeakable folly try to force upon the subtle thinking Orientals, the *truth?* The mythological conception of the origin of things and of God is at its basis the true one; but it undergoes degradation when clothed in language, and becomes untrue, as every inspiration beginning with truth becomes gradually debased and at last untrue by language. In the very first dawn of thought, before language has entered, the primitive man first realizes the agreements between his environment and himself. He notices that the objects of nature have many attributes which he also possesses, and perform the same acts as he does. The sun rises in the morning—so does he; it is warm—so is he; it is beautiful, like himself; it gazes upon him with an eye, round and wondrous as his own—somewhat different, indeed, but so are the eyes of animals—and so mighty that he dares not look upon it. It is stronger than himself; it is a god, a powerful friend, whom he both loves and fears. His simple heart longs to approach that human thing with the only worship that it knows; he bids it farewell when it retires at night, and greets it again in the

morning. Then enters language, with its words and definitions, telling him that a man is an *animal bipes*, and the sun is not. He knew that very well before, but never thought it so very important when compared with all that the sun really does for him. So he begins by drawing language into the service of his thought, trying to express himself in the mythological stories which we know so well. The taint is there; by slow degrees his thought begins to take a downward course, and at last becomes philosophy.

The living force of things is a mystery only to be apprehended by sympathy; it cannot be expressed in words or syllogisms; it is, and must always be, ignored by Rationalism, which must therefore always remain dead and barren. The knowledge of it is religion, which shows all things as bound together in a perfect and eternal unity. The active, conscious mind is always, so long as the routine is working regularly, engaged on the borderland of this mystic world striving to gather new life, new springs of action, to find their own expression in the data of the environment. The secret of right action is not strict definition and classification, but the power of seizing, when the moment for action arrives, amongst the many definitions and classifications possible, just those which will conduce to the purpose in view; the habit of quickly recognizing the essential attributes of each thing, and of grouping them into harmonious co-operation.

The inspiration finds its first articulate

brings health and joy. True, there is another conception of Aphrodite possible; what that brings we know also. Each will choose which he prefers, according to the degree of his reverence towards feminine beauty.

# XII

## SUB SPECIE AETERNITATIS

I PROPOSE in this my last study to offer some detached remarks upon what I conceive to be a healthy logical method. I cannot sketch out a system of reformed logic. Such work, if worth doing at all, must be done by others. I would rather see the logic of every man's thought growing out of his own life-experience than learned from any ready-made scheme.

The Idea is unspeakable. The moment we begin to treat it dialectically we must endow it with properties, forms, potentialities, limitations foreign to its pristine nature, and it becomes degraded, as Plato himself found in the end. If the inspired Idea is to be communicated at all it must not be by proof or demonstration, but in the language of poetry and metaphor, between those who are from the commencement in perfect sympathy together. Controversy has its legitimate place in scientific discussion of things physical, but Faith knows of none; it either understands and believes, or does not understand, but can neither be forced nor helped by arguments. In practical logic the

two methods of discourse will be blended together; or rather, things will be viewed from a standpoint which comprehends both, a vantage-ground higher than that of Individuality. The attempt of science to uproot Faith is an attempt to destroy the Ideas by which science itself alone exists.

The bane of philosophic thought is the sense of individuality, a sense which, from the ideal standpoint, is delusive, but is artificially produced and strengthened in us by the advance of civilization. The annihilation of the principle of individuality, which is in the strict sense the path to *knowledge*, does not mean the destruction of the individual abilities; it is, on the contrary, *their highest self-assertion*, each individual becoming blended with others, and working in harmony with them as parts of one organism; the petty contentions which sapped our strength now appear in their true light as defective technique, and the dissonances are merged in the grand music of a life which looks with clear and steadfast gaze upon the realities of existence, gathering all into one comprehensive survey, unclouded by party sophistry. This is the consummation of science, its final classification; the equation between the visible limited relative facts of the world around and the eternal Idea. The perception is recognized at last to be the reflection of the pre-existing Idea, while the Idea is but the form of the perceptions received from nature around. The sense of Unity and Sympathy is in-born and immortal; it cannot be effaced, and is still recognizable amidst the press

of modern life in the poetical, imaginative way of observation which no person, however mechanical and logical his mind, can entirely renounce, and peeps even through the smoke of Rationalism. To overcome the delusion of individuality, to view things *sub specie aeternitatis*, or, as I shall now call it, from the standpoint of Ontology, is the path to knowledge and the key to life.

Let the difference be illustrated by a familiar controversy. I quote from Huxley: "Cats catch mice, small birds, and the like, very well. Teleology tells us that they do so because they were expressly constructed for so doing—that they are perfect mousing apparatuses. . . . Darwinism affirms on the contrary, that there was no express construction concerned in the matter; but that among the multitudinous variations of the Feline stock . . . some, the cats, were better fitted to catch mice than others, whence they throve and persisted. . . . Far from imagining that cats exist *in order* to catch mice well, Darwinism supposes that cats exist *because* they catch mice well—mousing being not the end, but the condition of their existence." Ontology, however, says that they are both expressing the same fact in different words, because they see it from different sides. But each, when it asserts in an absolute sense that either phenomenon is cause, the other effect, is carrying causality into a region where it does not belong. Causality lies wholly within the sphere of the human mind. We *see* the mechanism at work, and understand that one action is cause, the other effect; but

this is no part of the eternal order, and we must not speak of causality when seeking the *source* of physical life. The fundamental fact is the will of nature for living things—cats and mice; the adjustment of each to the environment is both cause and effect; is the means by which we *perceive* the will to be actualized. All objects *are* will; we *perceive* them as activity, and *express* them by names.

This is in keeping with ordinary experience in other things. What, for example, is the *cause* of the great perfection attained during the last century in the mechanism of the pianoforte? The pianist will answer very plausibly that it is due to the development of his technique, requiring a more perfect instrument; the pianoforte maker will declare with equal reason that his improvements in the mechanism are what made the executant's technique possible. Modern speculative philosophy, were it to choose the subject for investigation, would write volumes full of inferences and inductions from unknown data, discussing every possible *opinion* with great acumen, as for example it has done with regard to Greek music and musical instruments, without bringing forth a single clear result from the smoke of technicality. The higher point of view shows that the enhanced perfection of the pianist's motor mechanism and that of his instrument are both phases of the same thing, and have sprung from a common source, namely, the increasing demand for executive skill among musicians, which exhibited itself in many other

ways besides, and is again only one form of a more universal will for greater complexity and variety in every department of life. It is the same with every mercantile commodity or instrument of our human activity; demand brings supply, calling for improved tools and methods which again stimulate demand. But ontologically the enhanced supply and demand are but the marks of an enhanced desire; are indeed finally the desire itself viewed from a reversed standpoint, and actualizing itself in progressively higher forms. We cannot say that either supply or demand, cost of production or market price, is cause and the other effect, except momentarily, and in particular instances, any more than I can say of the stove by which I am now sitting, whether the fire is cause of the draught or the draught cause of the fire, because they work together, each acting and reacting upon the other. To the onlooker, science, all appears as the work of blind chance, to teleology, looking from within, as intelligent design. The view of each is limited.

Science is continually at work determining, describing, cataloguing everything in the wide universe from stars to worms, and blinding the thoughtless practical public with its self-adulation. It cares little whether the results are relevant, or will be useful before the fashion for science has passed away and the catalogues of stars and worms, along with many other things now held sacred, have found a place in some future museum, as monuments of nineteeth-century folly, like the relics

which we keep of mediæval superstition. Before the single facts can become science in the strict sense they must be ranged under an Idea, a Unity, and not till then are they intelligible. The logic of science is in direct contradiction to this; the fully admitted truth that there lies something positive beyond and above physical facts is forgotten in the intolerance of party spirit. And must we not sometimes pause to ask: What after all is the purpose of all human effort? Is it to make new discoveries, and thereby to add to the possible instruments of our action? or is it to learn ourselves to act rightly and artistically with those that we have? Whatever might have been said five hundred years ago, at the present day there can be only one answer: We are suffering from a plethora of scientific facts, which are being exploited, commercially, financially, politically, by unscrupulous impostors who hide their crimes under the watchwords of science, "civilization," "progress," "development of resources," persuading the world that they are adding to the happiness and welfare of the human race. Science having ousted her enemy theology from power is treading the same paths; thinking only of herself and her own authority, a course which must ever lead to destruction. Mankind cannot dispense with either and does not wish their destruction, but the purification of both from sophistry. Science with its sophistical methods is not seeking to correct the abuses of theology. On this point our minds should be quite clear;

what Science is trying with all its might to destroy is the religious feeling of men, their sense of moral responsibility, and in its place to set up a nineteenth-century Rationalism, its own offspring; to create a god out of itself. The attempt may delude mankind for a time, but ultimately it must fail, because it is contrary to the order of nature. The world is made by God, not God by man.

I do not wish to recall theology to power. If there yet remains among the creeds anything which can be called by that name, its business is to teach, not to rule. There is no philosophic system, my own or any other, which I wish to see generally acknowledged. I am striving only for the recognition, in practice as well as in theory, in deeds as well as in words, that the foundations of the world are moral, and intellect is the instrument; that our first need in life both public and private is not knowledge, but sincerity, earnestness, rectitude, self-respect—those qualities which are summed up in Aristotle's Greatness of Soul. Knowledge is secondary; it is beneficial or pernicious according as it serves these, or as it serves the sophistical virtues which now flaunt themselves shamelessly and openly.

It would be wrong to leave unnoticed the great service rendered by scientific methods in criticizing and assaying the raw product of the Imagination. Every inspiration received is a living germ, but when it comes to be appropriated we must ask whether it is a flower or a weed, and what place

it can usefully occupy in the human garden. This is the true business of rationalist science, or of common sense, which is the same thing; nothing else can take its place. In these days of hysterical theosophies the need of rational discipline is greater than it has ever been. The worst of all offenders are here the artists; swayed and beguiled as he is by every glittering bauble, pampered by a society to whose fashions he panders, condemned by the necessities of modern life to be brought up as a hot-house plant, without even the elements of the wretched thing that we call education, flattered by a doctrine of Freedom as false as the Determinism of science, and even more directly pernicious, the artist enters life without one single qualification for his noble calling, except technical skill, driven to a wholly unnatural extreme; so little feeling his responsibility towards the divine revelation entrusted to him that he will drag it through any mire for his own welfare or self-glorification. The guilt of the artist is as deep as that of the man of science; but he needs not our reproaches, for a nemesis falls upon himself. How many of those who began so bravely have lived to bear fruit? In art folly brings its own retribution; but science now rules supreme.

The question of naming can only be dealt with by observing the sharp distinction already referred to between *established* and *speculative* science. A thing can only be properly named after it is known, when the science of it is complete, because we must, before naming, be sure that the thing really

exists, which we cannot do whilst the science is still speculative. Even if its existence is known it may be wrongly named owing to misunderstanding of its relations, as a certain green crystal was once called "copperas," and now that it is better understood "hydrated ferrous sulphate."

No science, unless perhaps it be nautical astronomy, is really complete at every point. All sciences are partly established, partly obscure and speculative. Wherever a science is still obscure we find, under our present system of referring everything to words, the same thing: on the one hand, a large collection of named facts, with detached portions of the causal ties, but no complete scheme; on the other, numerous speculative theories, often very elaborate and complicated, always difficult to grasp, because representing a purely individual standpoint, while pretending to occupy the same position and work by the same methods as true science. In learning such a quasi-science every link in the scheme, every definition, every grouping has to be learned independently by rote, and the whole is nothing more than a severe exercise of the memory; whereas in learning a true science every step carries conviction; each fact falls readily into its place in the forms of the brain, all prepared for its reception, and learning is an easy and pleasant task.

The theory of Belief as determined conjointly by Intellect and Will has been sketched in my *Essay on Culture* (ch. xv., pp. 192–198). The mark of a belief is an action, and the particular degree

of probability which will suffice to bring forth the act is determined by the force of the will, which need not necessarily be a direct wish for the truth of the conclusion, but may be only incidentally connected therewith. We have to distinguish between beliefs verifiable in the course of events, and those which are not verifiable but purely speculative. These last are scarcely the product of reason at all, but are almost wholly determined by the will; the merest shadow of syllogistic reasoning will be deemed sufficient when it is only the question of a theory, and the will, owing to some indirect advantage expected to accrue from its being *held* to be true, is very strongly in favour.

This is the position of unverifiable speculative science, the second of the two classes just named. The unverifiable theory stands upon an altogether different footing from one which is capable of verification, either at once or in the near future. Whether copperas consists of sulphur and iron is easily verifiable; the predictions of the Nautical Almanac will be verified when the time arrives; but whether there are three or four figures of the syllogism no one will ever know.

Thus we have first of all to distinguish—

1. Verifiable science; that which begins and ends in the actual facts observable in nature, turning them to account for the action of our own lives. Here words are kept from going astray by the possibility of verification at every step.

2. Unverifiable speculation, which when logically formulated and made a subject of exegetic

discussion is only a higher development of sophistry.

Let us now attend for a moment to the first class, science proper, which is altogether rooted in nature. In its practical application we must distinguish again between—

1*a*. Inferences verifiable by known facts already established, or at once determinable.

1*b*. Those which can only be verified by some act which it was the purpose of the inference itself to bring forth. The difference can easily be illustrated: One man possesses a quantity of gold ore; science can tell him exactly what amount of metal the ore contains, how to extract it, and how much labour he will have to expend. He is travelling along well-known paths, perfectly secure, because each step is verifiable by an appeal to known facts. Another man has inferred from his knowledge of geology that a certain district contains gold, and can be exploited at a profit. His inference is for the present an uncertainty, and although by nature capable of verification, can only be verified by actual trial; the truth cannot be positively known until it is too late. Here again the line between the two is not rigidly marked; they fade imperceptibly into one another. These two classes of inference correspond in a rough and general way to the two phases of human action which I have denominated routine and inspiration.

The intellectual activity of life consists of inferences from the known past to the unknown

future. Where the conditions lie within the realm of known science, fully verifiable, the future can be predicted with an approximation to certainty; in this case too they are known to everybody or can easily be learned; they make up the routine. In the higher life of inspiration and original action, the inferences are only verifiable in the event. Action has to be determined upon under conditions to some extent uncertain, and will therefore call forth the moral qualities of the will. The mind is engaged in collecting unknown data and bringing them into the sphere of the known; in verifying the past by the future. Under our false system of looking to reason to bring forth the truth out of itself we fail and fail again, always returning to the same worthless and grovelling methods, because we try to work without inspiration. Alas, with how few does not verification come too late! The eternal truths of the past are taught to each from his tenderest childhood; but even as he learns to form them with his copy-book hand he believes them not; his teachers themselves do not believe them. So he begins to test them once more by his own life, and learns when too late that dishonesty, cowardice, mean slander, and all the petty vices of a poor soul, though they may avail for a time, turn in the end upon those who practise them. Who will believe while there is yet time, while his destiny is yet before him? The only efficient weapon to conquer the future is Faith; but by a strange and cruel destiny faith is rare in youth. The cry of the youth is always for Liberty, and he

ends but in adding another fetter to his bonds, in setting one more seal to that which has been sealed and certified a hundred thousand times before. At the end of life we know how to live, but not at the beginning. This is the harvest which we have reaped from false logic and false ethics, that teach reasoning from syllogism instead of faith, liberty instead of self-restraint and nobility of soul. Opinion is not truth; freedom cannot be snatched, it must be earned. Could only these two truths, so well known, but so out of fashion, be rightly grasped, the technique of life would find itself.

Modern philosophy is the reflection of modern life; our thoughts, habits, creeds are made for us according to the fashionable cut, just as our clothes, because we are too feeble to make them ourselves. If an example of the smallness of soul engendered by the uncontrolled sway of irresponsible science and logic were needed it might be found in Education. Especially since the Franco-German War it has been discussed, studied, legislated upon, and many will say that "the nation has awakened to its importance." It certainly has not; the nation never troubles itself even to ask what education *is*. Were a definition attempted should we not find, as with Logic, that "in tone, in method, in aim, in fundamental principles, in extent of field," there is nothing which any two people would agree upon and call Education? The man who has to act, the schoolmaster, finding no unity, no true science, but only every imaginable colour of *opinion*, has to make the best compromise that he can, whilst

trying to please everybody. If scientific reformers have not yet succeeded in reducing our English schools to the condition of speculative commercial institutions, it is because the undeniably high character of our leading public school masters, aided by the healthy genius of British youth, has hitherto been strong enough to hold the position. How long is it likely that such men will continue to work for us under present conditions? The cant of modern education is a sheer device of the sophistical speculators whom we have chosen for our leaders, just as was the cant of Democracy in the Chartist days.

Or take British Imperialism. There is an Idea, and a great one, and I select it purposely because it is one with which personally I have little sympathy. If the British public can realize what Imperialism means; what are its dangers and difficulties; what sacrifices it requires, and what advantages it will bring; know in a word what it *is*, and choose whether it will follow this, or give it up and follow some other, steadfastly and without faltering, then it will act in a way worthy of a great nation, and whether it succeed or fail, it will become great and self-respecting. It matters little whether the Idea be good or bad in itself; it will be either, according as it is used. But what do we actually find? Imperialism is fashionable to-day; it literally cries out in the market; but what it is no one knows. We have the *word*, and that is enough; ten or twenty years hence it will again be unfashionable. The result may be

seen in China, Macedonia, South Africa, as the result of German "scientific" education may be seen in the German press.

Not only has modern life no conscious basis; it has no object; the nation knows what it wants just as little as the individual. There are plenty of sophistical formulas, "march of civilization" and the like, for whoever will believe them. Many who have never left their own homes assume it as an established scientific fact that railways and science and European government are a blessing to be coveted by all "barbarians." This is not the place to discuss such questions, but speaking of India alone, although I will not deny that British supremacy taken as a whole is a benefit to the people of the various nations of that continent, it is certain that just those institutions upon which we most pique ourselves are in some respects an almost unmixed evil; for example, railways and what we call "justice," *i.e.* law-courts after the European model. This, it is true, is only a personal opinion, but it is one which may often be heard expressed by officials when talking among themselves, though it does not generally appear in their reports. The thing which sustains our rule is one which we do not often hear spoken about, because to us it appears commonplace; namely, the fact that the English official is incorruptible. The native mind cannot comprehend this, and he worships it accordingly, just as he worships every other miracle, a locomotive engine, or a lovely bend of a river.

There is one philosophic truth which ought to be recognized by every one in these days; namely, that in the eternal nature of things there is no abstract obligation upon us to busy ourselves in helping on "civilization," since it will advance quite fast enough without our aid. Nor is there any special reason why one nation should undertake to "civilize" another which does not wish for such a blessing. It is not a necessity of nature that communications should be opened out, buried cities unearthed, stars and worms catalogued, and mines worked just at this particular moment in the history of the world. Gold takes no harm if it lies for a few thousand years; digging it out adds not a mite to our national wealth, but only puts money into the pockets of speculators. We live like ill-bred children, grabbing at the good things offered to us in a game of scramble, where the prize is to the rudest. The finer manners which make life great and *vornehm* are held of no account, because they cannot be named and classified. Yet it is these and not riches which make the man and the nation; wealth is only the instrument that serves them or their opposites. It may be that Europe is decadent; that our work is done and we have now to sink into decrepitude and worthlessness. If so, that is no reason to part with our dignity. Old age is the crown of a well-spent life; the last years of tranquil repose when toil and strife are over should be the happiest and the best, as we hold forth the prize to those younger friends who are still in the turmoil.

It is not fair to call the originator of all this mischief and degradation *science*. It is science run wild; science which has abused its power and degraded itself to become the slave of the joint-stock agent and financial gambler; science that deluges us with meaningless facts whilst striving to sever the bond of sympathy which unites mankind in a diviner and nobler unity than that of greed. We do not want new material; but we want a sane, sober, and workable philosophy to show us how to use what we have, how to live. The need has been recognized hitherto by very few; but these few are the best. Some have left us, but their heritage is ours; we look to it to save modern Europe, and with it the whole world. And we may look to the work of these men with all confidence; for never in the history of mankind have there been men who thought more nobly than Carlyle, Ruskin; in America, Emerson; in Germany, Schopenhauer, Wagner, besides many others of less note. And they have no mean following. All these, and many more, have recognized the true cause of the falseness of modern life, and have proclaimed fearlessly, each in his own language, that the springs of life, of art, of politics, lie in eternity, and not in human formulas and conventions, their lives have been a steadfast protest against sophistry.

---

"O Ihr Menschen. Fühlt gesund! handelt wie Ihr fühlt! seid frei! Dann wollen wir Kunst haben."

# FIRST PRINCIPLES

*"Neque enim multae, sed una sapientia est"*

1. The physical world is surrounded on every side by the metaphysical. All that we see around us has sprung from eternity, and to eternity again it returns.

2. The metaphysical world is, as regards our objective cognition, a negative. It has neither parts nor attributes; it is therefore ineffable, and, having no parts, is One.

3. The metaphysical world is positively known in the self-consciousness, where it is directly apprehended as a unity. It is called Will, but in all strictness it is unnamable; an inaccuracy is committed in using the word for the directed desires to denote the ineffable Will-in-itself.

4. The predicate "real" may be assigned either to the physical or to the metaphysical world; but the reality of each is very different; that of the first is Action; that of the second Being. Whichever we choose, the other will appear unreal.

5. The physical world is nothing else than our perception of its action; conditioned therefore by the perceiving mind. Its forms are Time, Space and Causality.

6. The metaphysical world is continually projecting itself into the physical through the forms of the latter; taking body; becoming incarnate. Hence the delusion of Individuality.

7. Every object in the world is an Organism, *i.e.* a more or less complex mechanism for the actualization of Will in some particular direction. Activity,—either potential

(dormant, or stored) or kinetic (doing work)—is its very essence and sole reality. Things exist by virtue of their action.

8. The action of every thing or organism is, as regards its form (chemical and physical processes), the same. The common distinction drawn between animate and inanimate things is conventional. Each individual object comes into being, grows, acts, changes, and dies as an organism. Its constituent material remains, and its action persists in the general scheme of causality.

---

9. God, who has always been recognized in the self-consciousness of men, is the supreme universal Will, at once transcendent and immanent.

10. The objects of the physical world are His features, as strictly as the parts of a man's body are the man himself, as the waves of the sea are the water itself. The forms in which He becomes incarnate are infinite, and every act that takes place emanates directly from Him.

11. The natural striving of the human mind is always for the comprehension of God; but our comprehension must necessarily be imperfect. It is a great help to approach him through any one of his bodily forms, and the instinctive longing, felt almost universally, for a personal or anthropomorphic God, is in no way unnatural or degrading; the human soul will not remain satisfied with a mere mental abstraction. But different minds will conceive very different idols, which will be more or less perfect realizations of the one true Idea, according to the wider or narrower horizon of the conceiving individual mind. The intolerant efforts by which each theological sect tries to force its own particular idol upon others are part of the impurity which collects round the Idea in our imperfect minds. Their object is to gain supremacy and power for individual ends.

12. Revelation is first in the human heart, not in any book or other object. The sacred Scriptures of different religions are exalted commentaries upon that Revelation which is given to all.

13. No religion—except perhaps at its very first dawn—is a perfect representative of the pristine Idea. Like all inspirations, religions become more and more contaminated as they assume bodily form, and may degenerate into falsehood and crime. But the Idea still retains its vivifying power with those who learn to recognize it through the imperfect form, and fix their view upon it alone.

---

14. The final purpose of life is not knowledge but action. Knowledge and Belief (imperfect knowledge) are subsidiary to action.

15. Single facts are not knowledge.

16. The syllogistic inferences of the reason from observed facts are altogether uncertain; they also are not knowledge, but belief, or varying degrees of probability.

17. Science is knowledge of the connections of any given fact with the general causal scheme; of the actions and reactions passing between it and every other phenomenon with which it stands in causal relationship.

18. The tracing of every causal tie leads on ultimately to the Infinite, *i.e.* to something which is not in Time, Space, or Causality. The track of knowledge may be carried a little further with time and closer investigation, but there comes at last a point beyond which we cannot go.

19. Complete science is impossible until we know every thread of the causal pattern. Every phenomenon would then be deducible from every other, just as we can travel from any railway station to any other in the country if there is a complete railway guide.

20. But, as science is (and presumably always will be) incomplete, a central terminus from which the different

paths are assumed to radiate is necessary. Thus, although we cannot survey the whole, we are able to trace each thread, with its branches, up to the point of origin, and so to follow the different single sciences.

21. When the thread cannot be followed through to the end the science is popularly said to be "empirical," *i.e.* without a foundation; in practising such a science we shall always be liable to err, to confuse the causal ties.

22. The point of origin may be variously chosen; upon it the aspect of things will altogether depend. The same things will appear different to observers from different points of view. It is like a person examining a galaxy of figures through a lens which enormously magnifies those lying within its focal field, showing the others small and distorted.

23. In science each observer chooses his own standpoint, or that of his party, to be the origin of his investigation, whence the perspective of the whole becomes distorted. Just as in the contemplation of Will the physical world must be shut off, so in that of the physical world the individual will must be withdrawn, and things viewed *sub specie Aeternitatis*. The establishment of such correct perspective is the proper business of Logic, that things may appear as they really are, in their natural proportions.

24. From this standpoint of Eternity objective and subjective coalesce, and are recognized as showing only opposite sides of the same thing, as expressed in the Vedic formula *tat-tvam-asi*.

25. Owing to the systematic neglect of the unity of purpose in all things the world has in modern times been led astray by science. On the one hand science contradicts itself; for in the most immediately important sciences, such as Education, Logic, Medicine, no two persons think alike. On the other hand human life has become selfish, sordid, mean, joyless. The end of life, both individual and political, is now self-interest.

26. The business of speculative science is not to discover new facts (which it can never do), but to bring about the clearer vision, or Insight. When that is attained all our present disputes, and with them sophistry, will cease. For Opinion we shall then have Truth.

27. The true purpose of creation is not individual but universal; not material but moral. He who follows his own material self-interest, however powerful his abilities, however skilful his plans, is setting himself in antagonism, not only to other, perhaps weaker individuals, but to the entire forces of nature, and is doomed to destruction.

28. In this world we are in a state of tutelage; and need, especially when young, some guidance to lead us on to truth. Such guidance can only be found by Faith in whatever is true and great and noble. Without faith life becomes chaotic and purposeless.

29. All action is rhythmic. But as the individual actions collide with each other their pulsations interfere, and a *chiasmos* or cross-rhythm ensues, at first imparting character and intelligibility to the play of action. But at last the rhythms become so complex and numerous as to be unintelligible, and the music of the universe is noise. Yet in everything the trained ear may still detect through the discord the pulsations of the original rhythm.

30. Our consciousness of freedom is no delusion; the Will, as such, is free; but it can only project itself in action through the forms of causality. The freedom which we feel cannot assert itself in our practical life until we have learnt by training how to act. We do not, as political agitators assert, attain the ends of life through freedom, but we obtain freedom through life.

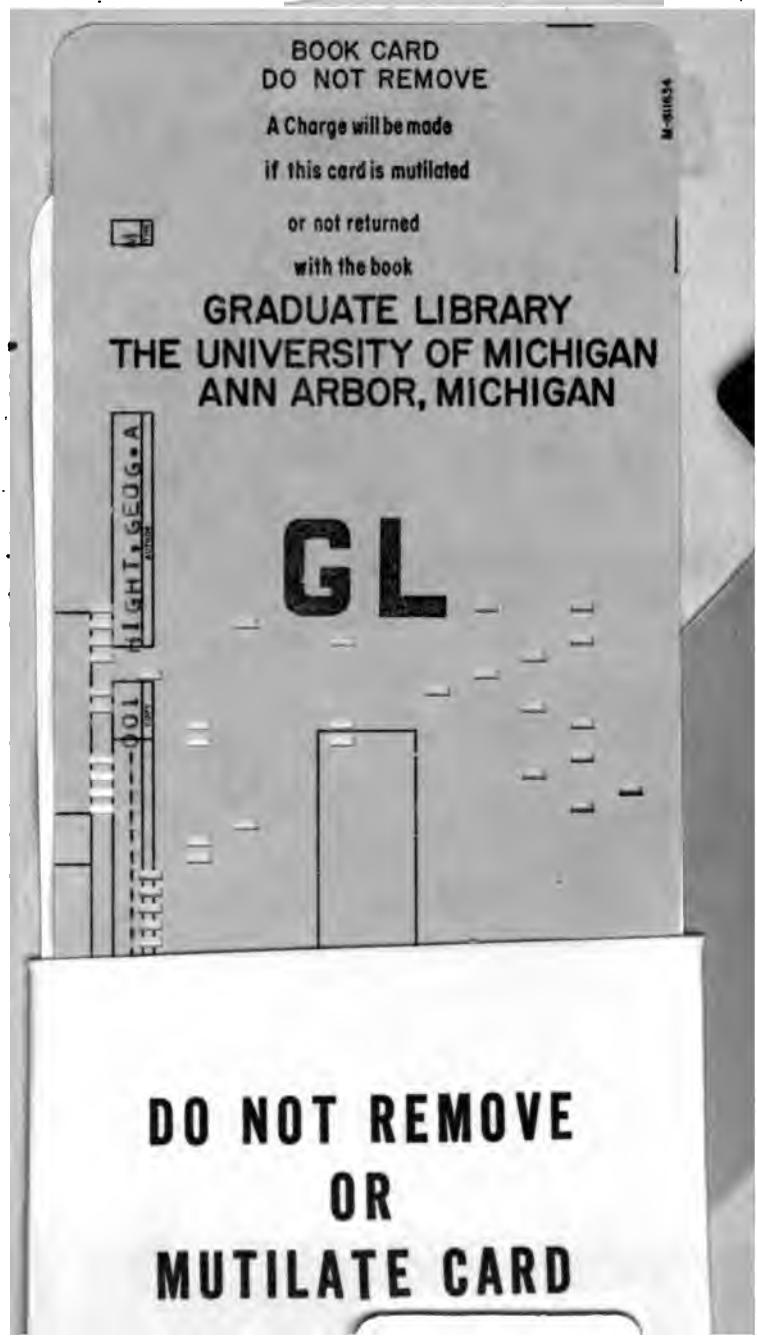
31. Each organism, as it approaches the perfection of its powers, seeks to join hands with others, and unite its efforts with theirs to a higher activity. Such organic union, however, must not be confounded with mechanical mixture.

It is a law of nature that each agent, when it joins in sympathy with another, thereby enhances its own powers, the two united effecting more than they could do separately. The final consummation of creation would be the coalescence of all things into one harmonious whole.

APR 18 1916

THE END

PRINTED BY WILLIAM CLOWES AND SONS, LIMITED, LONDON AND BECCLES.

[redacted]
w the charge, book must be brought to the desk.
TWO WEEK BOOK
DO NOT RETURN BOOKS ON SUNDAY
DATE DUE
JAN 16 1956
1955
JAN 16 [redacted]

3 9015 02643 7403